

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

N693953165

FACILITY: RIVERSIDE - OLD VANDY NORTH CPF		SRN / ID: N6939
LOCATION: SW SW SW Sec 17 T32N R3W, GAYLORD		DISTRICT: Gaylord
CITY: GAYLORD		COUNTY: OTSEGO
CONTACT:		ACTIVITY DATE: 03/23/2020
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Field inspection for FCE		
RESOLVED COMPLAINTS:		

On Monday, March 23, 2020, I inspected the Riverside Old Vandy North CPF. I did not find any violations during my inspection.

This facility is covered by Permit to Install No. 26-01B, issued January 30, 2014.

Permit 26-01B, Table FGENGINES, Condition IV.1 requires that any add-on control device on an engine must be installed and operating properly. This facility has two engines. Both are equipped with catalytic oxidizers. Both catalytic oxidizers were in place.

Using a remote infrared thermometer I checked the temperatures on the inlet and outlet sides of the catalytic oxidizers. In both cases the outlet side was hotter than the inlet side. This suggests that the catalytic oxidizers were burning up air contaminants from the exhaust as it passes through. This in turn suggests that the catalytic oxidizers are operating properly, in compliance with the permit condition.

Condition IV.2 requires a device to monitor fuel gas use. I looked for this but did not find it. Records that Riverside supplied included fuel use data, which suggests that the fuel monitor is in place.

Conditions VIII.1 and 2 require that the two engine stacks should each have a maximum exhaust diameter of 12 inches at a minimum exhaust height of 43 feet above ground level. The stacks are tall and appear to meet the dimensions cited in the permit condition. The stacks exhaust unobstructed vertically upward, which is also required by this permit condition.

Table FGFACILITY, Condition II.1, prohibits burning sour natural gas in the facility. It appears that the facility does not burn sour gas. I didn't smell any. The facility has warning signs for sour gas. It has an iron sponge, which means Riverside is removing a small amount of hydrogen sulfide from the gas they are processing; iron sponges are suitable for this but not suitable for removing high concentrations of hydrogen sulfide. It appears therefore that it would be possible to burn sour gas at this site, but most likely this is not being done.

If hydrogen sulfide were being burned in any significant quantity, I would expect significant corrosion caused by H₂SO₄ in the exhaust stream. I did not observe significant corrosion.

COMMENTS:

The facility is on Lewis Road just north of McGregor Road. McGregor Road goes west from Old 27 about a mile north and west from Vanderbilt. There were no particular problems accessing the facility.

The facility identifies it at the Riverside Energy Michigan LLC Old Vandy North CPF, T31N R3W, Otsego County Mi. I did not note any brine tank at this facility. Something, presumably brine, was however being piped to a salt water disposal well. The sign on the well said Riverside Energy Michigan LLC / 231-955-4000, 989-705-7665 / Chaffee D1-17 SWD / Permit #54733 / T 32N R3W SW ¼ SW ¼ SW ¼ / Corwith Twp / Otsego Co

The facility includes a glycol dehydrator. I didn't see a builder's plate on the burner, so I don't know its input heat value. It appears the standard size and type, which would mean a burner somewhere in the vicinity of 125,000 to 200,000 BTU per hour heat capacity. The burner stack was about 6 inches diameter and perhaps 28 feet high, unobstructed vertically upward. The still vent was about 20 feet high and 1.5 inches diameter, ending in a T fitting. I didn't observe any "steam" from the vent, nor did I notice any glycol odors nearby.

Both engines inside the sheds had catalytic oxidizers in place. Both had Caterpillar digital engine instrument readouts which were functioning.

The western engine readout said 1057 RPM, 52 PSI (oil pressure presumably), 190 degrees f (coolant temperature, presumably), 33457 hours, 27 volts. It had an AFRC control box which said the AFRC was operating. This engine was labeled as Unit 1224. According to my remote infrared thermometer, the catalytic oxidizer temperature on its outer shell was 403 degrees f inlet, 625 outlet.

The eastern engine readout said 1007 RPM. This readout was not cycling through its values so that was the only reading I got. This engine was labeled as Unit 1080. The catalytic oxidizer temperature on its outer shell was 426 degrees on the inlet side, 515 on the outlet side.

Minor tanks included:

Two 300 gallon drum on stilts tanks near each engine. Each pair included one tank of Chevron HDAX Low Ash Gas Engine Oil and one of Chevron Regal ISO 100 AIO oil.

3 larger tanks on the floor inside the shed, orange painted, labeled as Used Oil.

Unlabeled metal tanks near the engine radiators, probably coolant

Two 300 gallon drum on still tanks over lined wooden berm structures, near the glycol dehydrator. One was labeled as methanol and the other triethylene glycol.

Maintenance appeared adequate. I did not see any leaks or spills. I didn't see any stained soils which would make me think there had been leaks or spills in the past.

NAME _____

DATE _____

SUPERVISOR _____

William Rogers Digitally signed by William Rogers
Date: 2020.04.07 14:10:50 -04'00'

Shane Nixon Digitally signed by Shane Nixon
Date: 2020.04.07 14:11:53 -04'00'