

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

N725239987

FACILITY: HRF Exploration & Production - TLC 20		SRN / ID: N7252
LOCATION: SW SE NW, T29N-R4E, Section 15, RUST TWP		DISTRICT: Gaylord
CITY: RUST TWP		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 05/26/2017
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On May 26, 2017, I inspected the HRF South Rust 10C, also known as TLC 10. This is a Central Production Facility (CPF) located on the Turtle Lake Club, a gated hunting club property off the south end of Ferrier Road south of Hillman.

It appears this facility has been misclassified since it went into operation. Our database lists this facility as a minor source. It is not listed in the Michigan Air Emission Reporting System, and I can't find any emission reports for it. However, it is one of the larger CPFs in our area. Based on its reported emissions and the amount of equipment on site I suspect it should be a Synthetic Minor and a regular part of our inspection schedule for Title V opt-out sources. I will investigate further and correct our information on this facility as appropriate.

PERMIT CONDITION REVIEW

The facility includes three compressor engines and a glycol dehydrator, plus associated tanks and minor equipment. It is covered by Permit to Install 104-03A.

Permit 104-03A, Table EUDEHY, requires the operator to prove exemption from the more stringent control requirements of 40 CFR Part 63, Subpart HH, assuming that the facility does in fact meet one of the exemptions. HRF has submitted documentation, attached, showing that benzene emissions from the dehydrator are less than 0.90 megagrams (approximately one ton) per year. They used GRI Gly-Calc (printouts and gas sample analysis attached) to estimate the benzene emissions. This is an acceptable method under their permit. The results show total uncontrolled "total VOC emissions" of 0.1104 tons per year. Benzene would be included in this. This amount is less than one ton, so the results prove the facility meets that exemption in Subpart HH, in compliance with the permit condition.

Table FGENGINES, Conditions I.1 and I.2, sets emission limits of 24 tons per year per engine of NOx and 22 tons per year per engine of CO. There are three identical engines, so total emissions for the flexible group would be 72 tons per year NOx and 66 tons per year CO. Emissions calculations, attached, report 48.46 tons per 12 month time period of NOx and 43.57 tons of CO. Emissions per engine are all below 24 tons NOx and 22 tons CO. This complies with Conditions I.1 and I.2 of PI 104-03A.

Condition III.1 requires a Malfunction Abatement Plan. The company submitted one. AQD approved it February 23, 2011. This complies with the permit condition.

Condition III.2 applies to engines with add-on control devices. The engines at this facility did not have them, so this condition is not applicable.

Condition IV.1 also applies to engines with add-on control devices, and is therefore not applicable.

Condition IV.2 requires a device to measure gas consumption on the engines. Condition VI.2 requires monitoring this gas consumption. Condition VI.5 requires keeping gas consumption records. I did not identify engine gas meters on site, but gas consumption figures are included in the attached emission estimates. This implies the information is being collected as required, in compliance with these permit conditions.

Condition VI.3 requires a maintenance log. Example pages of the maintenance log are attached. This complies with the permit condition.

Conditions VI.6 and VI.7 require keeping monthly and 12 month NOx and CO emission calculations. An emission sheet with this information is attached. This complies with the permit condition.

Conditions VIII.1, 2, and 3 set stack dimensions for the compressor engines. All three are specified as a maximum exhaust diameter of 12 inches and a minimum height of 36 feet above ground. The stacks appeared to meet these requirements.

COMMENTS:

The facility contains three natural gas fired compressor engines. The engine to the north on the east side was labeled 1559-A in characters made out of welder bead. The engine to the south on the east side was labeled 1559-B. I didn't see any label on the single engine to the west.

I stayed away from 1559-A because a well services company employee told me he was pumping acid in that area; the hoses ran around the engine. I thought it was safer to stay away. This engine was running. I met Mr. David Lentz, the operator for HRF, who told me it was running at 1100 RPM.

I did not see how to get to the instrument panel on the west engine. It was running. Mr. Lentz told me that engine was also operating at 1100 RPM.

Engine 1559-B was running. According to its instrument panel it was at 1095 RPM, 25 volts, oil pressure 57 PSI, coolant temperature 190 degrees f, 84,111 hours of operation. This engine had some visible smoke or fumes coming from the top of the engine itself. I didn't see any from the other two engines.

All three engine stacks appeared to meet permit requirements of a maximum diameter of 12 inches and a minimum height of 36 feet above ground. They were unobstructed vertically upward. There was no opacity in their exhaust.

The facility includes a glycol dehydrator. It has a Wenco Flame Arrested Burner. According to its builder's plate it is rated at 125,000 BTU per hour. The burner stack appeared to be about 6 inches in diameter by 22 feet high, terminating in a flat cap. The still vent appeared to be about 2 inches diameter by 20 feet high, unobstructed vertically upward. There was some "steam" from the still vent. I didn't see any other opacity. There were mild glycol odors downwind of the facility.

I noticed the following tanks:

Two 400 barrel tanks and one smaller tank, inside a lined berm, piped to a salt water disposal well. Therefore, they were probably brine tanks. The well was labeled Permit 48668, HRF Exploration and Production LLC, Upper Malvaney B2-15 SWD.

Seven 300 gallon sized drum on stilts tanks near the engines. Two tanks near 1559-B and the west engine were labeled as Chevron Regal R&O ISO 100 and Chevron HDAX Low Ash Gas Engine Oil, SAE 30. There were two similar tanks near 1559-A, but I did not go near them due to safety concerns with acid being pumped around in the area. The seventh tank was an unlabeled 300 gallon tank near 1559-B. All of the tanks were above lined wooden berm structures.

I did not note seeing a glycol tank near the dehydrator. The unlabeled tank mentioned above was also near the dehydrator, so it may have been glycol.

Maintenance appeared good. I did not see any stained soils or other evidence of spills or leaks.

Originally, I had believed this facility was violating its NOx and CO limits, and I contacted HRF to start enforcement action. However, I had misread the NOx and CO limits as applying to the entire flexible group of engines, while in fact the limits were the amount allowed for each one of the three engines. Therefore, the facility is complying with its NOx limits. I have discussed this with HRF and informed them I have ended the enforcement procedures.

NAME William J Rogers 2. DATE 7/5/17 SUPERVISOR SN