

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

N734139725

FACILITY: SCHMUDE OIL INC.		SRN / ID: N7341
LOCATION: T32N, R2W, section 28, VANDERBILT		DISTRICT: Gaylord
CITY: VANDERBILT		COUNTY: OTSEGO
CONTACT:		ACTIVITY DATE: 05/05/2017
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection		
RESOLVED COMPLAINTS:		

On May 5, 2017, I inspected the Schmude Oil CPF in Section 29, T32N R02W, Corwith Township, east of Vanderbilt. The facility was not operating at the time of my inspection; personnel of Natural Gas Compression Services were on site maintaining the engine.

According to the emission inventory, this facility has one engine without catalytic oxidizer. This was what I found on site.

Permit 86-04, Special Condition 1.1, limits the facility to 73 tons of nitrogen oxides per 12 month rolling time period. According to emission records, attached, the facility hasn't run much recently. It did run from July, 2016, through March, 2017 so far. In that 9 months it emitted 15.304 tons NOx. Highest emissions were just over 2 tons NOx per month, in March 2017. A rate of 2 tons NOx per month would add up to 24 tons NOx per year, which would comply with the permit condition.

Special Condition 1.2 limits natural gas use in EUENGINE to 52 million standard cubic feet per 12 month rolling time period. 9 month fuel use from July 2016 through March 2017 was 24.4 MMSCF. Fuel use at its highest was 3.2 MMSCF per month in March, 2017. Extended to 12 months this would add up to 38.4 MMCF per 12 months, which would comply with the permit condition.

Special Condition 1.3 prohibits burning sour gas at the facility. I didn't see or smell any evidence at the facility which would indicate there was sour gas in use.

Special Condition 1.4 requires monitoring natural gas consumption for EUENGINE. I did not identify a gas flow gauge on the engine while I was there, but monthly records include gas consumption for the engine, which implies that the operator is monitoring it. An email from Schmude Oil, attached, says that engine fuel values come from a gas flow meter operated by Trendwell.

Special Condition 1.6 requires recording monthly and 12 month values for gas burned in EUENGINE and NOx emissions from EUENGINE. This information is on the production record, attached. This complies with the permit condition.

Special Condition 1.7 sets maximum stack diameter at 10 inches and minimum stack height as 40 feet. The stack appears to meet these conditions. Diameter was 10 inches as closely as I could tell. I measured out the length of the stack's shadow in multiples of my own shadow, in order to estimate its height in comparison to my own. By this method the stack came out to 40 feet, plus or minus a bit for the inaccuracy of the method I used.

The permit contains no conditions about the glycol dehydrator, but the operators must still comply with the provisions of 40 CFR Part 63, Subpart HH for glycol dehydrators. This may be done by demonstrating that the facility meets one of the exemptions from the more stringent requirements of Subpart HH. One of the exemptions is for glycol dehydrators that process less than 85,000 standard cubic meters of gas per day, or roughly 3 million standard cubic feet per day. The company provided production information, attached, which shows that total facility production, sales and fuel gas combined, is about 160,000 or 170,000 SCF per day, which is 0.16 or 0.17 million cubic feet per day. This adequately demonstrates that the facility meets the exemption. Therefore the facility is in compliance with Subpart HH by demonstrating it meets the exemption.

COMMENTS

The facility contains one medium-small Caterpillar natural gas fired compressor engine without catalytic oxidizer. This was not operating at the time of my inspection. Two gentlemen from Natural Gas Compression Services were on site doing maintenance on the engine. The engine is marked as NGCS 21 in metal characters welded to the engine mount.

The facility contains a glycol dehydrator. This is not mentioned in the permit. Regardless, the operator should show compliance with MACT HH, for glycol dehydrators. The company provided information documenting that the dehydrator processes a small enough amount of gas to be exempt from the more stringent emission control requirements of MACT HH. Based on the size of the facility it seems likely this claim would be correct. Based on this facility processing only Antrim Formation gas, which contains little benzene, it also seems likely it would meet the MACT HH exemption for facilities that emit less than approximately one ton of benzene per year.

The dehydrator has a Hanover Company Flame Arrested Burner rated at 200,000 BTU/hour. The burner stack was about 6 inches in diameter and about 16 feet high, exhausting unobstructed vertically upward. The still vent emerges on an angle from the facility shed wall perhaps 13 or 14 feet above ground level. It appears to be about 2 inches diameter, ending in a T fitting. There was some "steam" coming from it but no other opacity from the dehydrator. I did not smell any glycol odors near the dehydrator.

The facility doesn't have a brine tank or slop tank that I could see. Small tanks on site were four 300 gallon drum on stilt style tanks. Two were inside the compressor shed, labeled as Chevron HDAX low ash gas engine oil and ISO 100 industrial oil. Two were just outside the shed, under an extension of the shed roof, and over a lined wooden berm structure, near the dehydrator. They were labeled as methyl alcohol and triethylene glycol.

Maintenance appeared good. I didn't see any stained soils or other evidence of spills or leaks.

NAME William J Rogers 2.

DATE 5/17/17

SUPERVISOR SN