

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

N745349133

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| FACILITY: RIVERSIDE - BRADY BUNCH | SRN / ID: N7453 |
| LOCATION: SEC 5 T30N R6E NW SW SE, LACHINE | DISTRICT: Gaylord |
| CITY: LACHINE | COUNTY: ALPENA |
| CONTACT: Natalie (Natasha) Schrader, Technical Assistant | ACTIVITY DATE: 06/07/2019 |
| STAFF: Bill Rogers | COMPLIANCE STATUS: Compliance |
| | SOURCE CLASS: SM OPT OUT |
| SUBJECT: Site inspection and records review for FCE | |
| RESOLVED COMPLAINTS: | |

On June 7, 2019, I inspected the Riverside Brady Bunch facility. I did not find any violations of Air Quality rules or of their Air Use Permit, PI 235-05.

Earlier, Ms. Natalie Schrader of Riverside had sent me facility records to review.

Permit 235-05 includes two emission units. These are a glycol dehydrator, EUDEHY; and a natural gas fired reciprocating engine, EUENGINE. There are also two flexible groups; FGMETHANOL, any methanol storage tanks currently on site or to be installed in the future; and FGFACILITY, all equipment on site.

EUDEHY must comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63 Subpart HH. The United States Environmental Protection Agency has not delegated enforcement of this Subpart to AQD. It is almost certain the facility would be in compliance with Subpart HH by exemption. Subpart HH exempts any glycol dehydrator from its control equipment requirements if the dehydrator's emissions of benzene are less than approximately one ton. This is a moderate-sized natural gas Central Processing Facility processing Antrim formation gas. Due chiefly to the extremely low Hazardous Air Pollutant typical of Antrim gas, no dehydrator for which I have seen emissions estimates had more than a trace of benzene emissions; none had any significant fraction of a ton of them.

Permit 235-05, Special Condition 1.1a, sets NOx limits of 45.4 tons per 12 month time period on EUENGINE. Special Condition 1.1b sets CO limits of 33.4 tons per 12 month time period. Emission estimates, attached, claim 12 month emissions of 12.37 tons NOx and 11.75 tons CO. This complies with the permit conditions.

Condition 1.2 requires an approved Malfunction Abatement Plan. The company submitted one, which AQD approved September 22, 2016. This complies with the permit condition.

Conditions 1.3, 1.4, and 1.9 refer to installation, operation, and recordkeeping for an add on control device, if there is one. This facility does not have one. Therefore these conditions are not applicable.

Condition 1.6 requires installation of a fuel gas measuring device for EUENGINE. Condition 1.10 requires recording fuel use. I found a digital display on the outside of the compressor shed which included the fuel use. The emission records, attached, include fuel use. Therefore there is a fuel measuring device and records are being kept, in compliance with the permit.

Condition 1.8 requires a maintenance log. An example page from the maintenance log is attached.

Condition 1.11 requires monthly and 12 month NOx emission calculations. Condition 1.12 requires monthly and 12 month CO emission calculations. This information is included on the attached emission estimate report. This complies with the permit conditions.

Condition 1.12a sets stack dimensions as a maximum diameter of 16 inches at a minimum height of 36 feet. By eye I estimated the stack as about 12 inches diameter and about 40 feet tall. This complies with the permit condition.

Conditions 2.1a and 2.1b set NOx and CO limits of 89 tons per 12 month time period each for FGFACILITY. FGFACILITY includes the engine and the dehydrator; engine emissions are 45.4 tons per

year NOx and 33.4 tons per year CO, while the dehydrator adds another 0.78 tons NOx and 0.18 tons CO. This gives totals of 46.2 tons NOx and 33.6 tons CO. This complies with the permit limits.

Condition 2.2 prohibits burning sour gas. I did not see or smell anything which would lead me to believe that there was any sour gas being processed at the facility.

Conditions 2.5 and 2.6 require acceptable monthly and 12 month NOx and CO emission estimates for FG FACILITY. I did not find this explicitly calculated and presented on the attached records, but emissions for both pieces of equipment on site are included, so I deem the records sufficient to comply with this permit condition.

COMMENTS:

The facility shed has three facility name signs affixed to it: Tilli Bean, Little Rascals, and Brady Bunch. All three signs give the location as NW SW SE Sec 5, T30N R06E, Green Twp, Alpena Co. In case of emergency number is 989-705-3665. Although three facility names are listed, there is only one compressor engine and one dehydrator in the compressor shed. Previous inspections also list only one engine and one dehydrator.

The compressor engine is one natural gas fired Caterpillar engine with no catalytic oxidizer. Metal characters welded to the engine mount identify it as GCS 1101. It was running at the time of my inspection. The stack appeared to be about 12 inches in diameter with a height of about 40 feet. There was no opacity in the exhaust. There was no unusual vibration or odor associated with the engine.

According to the control panel engine coolant temperature was 200 degrees f; compressor oil temperature 180; engine oil pressure 60 psi, compressor oil pressure 60 psi. There was a box with digital displays on the outside of the compressor shed which included numbers I believe to have been the fuel supply to the engine; the permit requires measuring and recording this.

There is a glycol dehydrator in the shed. It has a builder's plate identifying it as a Wenco flame arrested burner of 200,000 btu/hour capacity. The glycol still vent appeared to be about 2 inches diameter at an elevation of about 20 feet, with a T fitting at the top serving as a cap. I did not see any opacity from it, although I did smell mild glycol odors nearby. The burner vent was perhaps 6 inches diameter and 19 feet high, terminating in a flat cap.

Tanks on site included two 400 barrel oilfield storage tanks which appeared to be brine tanks. They were inside a lined berm. They were piped to a well labeled as Riverside Energy Michigan LLC / Permit 51525 / Male D3-5 SWD / NW/4 SW/4 SE/4 Sec 5, T30N R5E, Green Twp, Alpena Co. SWD would indicate this is a salt water disposal well, which is consistent with the tanks being brine tanks.

Small tanks on site included:

Inside the shed, three 300-gallon drum on stilt style tanks over lined wooden berms. One had no label I found. One was labeled Chevron Regal ISO 100 oil, one Citgo Pacemaker Geo 1230 oil. There were also two orange-painted tanks on the floor, labeled as waste oil.

Outside the shed, one 300 gallon drum on stilt style tank over a lined wooden berm. This was near the dehydrator. It was covered in a heavy tarp, so if it had a label I could not see it. Nearby were two more tanks, probably 150 gallon since they appeared to be the same diameter as the common 300 gallon tanks but were shorter. One was labeled as Unichem 7142, the other was unlabeled.

Maintenance appeared to be adequate. I did not see any leaks or spills. I did not see any stained soils which would make me suspect there had been leaks or spills earlier. I did not notice any odors except mild glycol odors near the dehydrator.

NAME William J Rogers DATE 8/17/19 SUPERVISOR [Signature]