

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

N606460870

FACILITY: Delta Oil Company - Schrader		SRN / ID: N6064
LOCATION: NW NW SW T31N R02W SEC23, GAYLORD		DISTRICT: Cadillac
CITY: GAYLORD		COUNTY: OTSEGO
CONTACT: Dennis Marelich , President		ACTIVITY DATE: 11/09/2021
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of this opt out source.		
RESOLVED COMPLAINTS:		

The Delta Oil Company, Schrader is a natural gas central processing facility (CPF) located in Schrader Township, Otsego County. Operations at the facility are managed by Denergy Services located in Johannesburg, Michigan. At this facility, sweet natural gas from low-pressure Antrim formation wells flow to the facility via buried flowlines. Upon reaching the facility, the gas is compressed and directed through a triethylene glycol dehydrator for moisture removal. Following dehydration, natural gas is directed to a sales pipeline.

I performed an inspection on this source with respect to Permit to Install (PTI) 616-96. The inspection consists of an onsite inspection of equipment and a review of records required by the PTI. The onsite inspection was performed on November 9, 2021. Required records for the facility were requested on October 29, 2021 and received on November 11, 2021. The period of time requested for these records was September 2020 through August of 2021. Following are findings of this inspection:

Upon arrival on site, no odors were noted downwind and no visible emissions from any point were noted. The facility appeared in full operation. An inventory of pertinent equipment at the facility was as follows:

Engines

- Caterpillar model 3512 LE V-12 engine with no catalytic emission control
 - Unit Number – 1286*
 - RPM – 985
 - Oil Pressure – 62 psi
 - Water temperature – 190 F
- Caterpillar model 398 HC TA V-12 engine with catalytic emission control
 - Unit Number – 1285*
 - RPM – 960
 - Oil Pressure – 68 psi
 - Water temperature – 196 F
- Caterpillar model 379 HC TA V-8 engine with catalytic emission control
 - Unit Number – 824S*
 - RPM – 1672
 - Oil Pressure – 69 psi
 - Water temperature – 180 F

*This engine appears to be the same as in previous inspections.

Other

- Five 400-barrel (bbl) capacity aboveground storage tanks (AST) and one 200 bbl capacity AST
- Glycol dehydrator, this unit is exempt from permitting per R 336.1288(2)(b)(ii)

Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Nitrogen Oxides (NO_x) emissions from this facility are not to exceed 89 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with these emissions limits is demonstrated through recordkeeping and emissions calculations. Records provided from the company for the requested reporting period indicated the following:

- CO emissions for the facility as of August 2021 were 3.95 tons based on a 12-month rolling time period as determined at the end of each calendar month.

- VOC emissions for the facility as of August 2021 were 1.97 tons based on a 12-month rolling time period as determined at the end of each calendar month.
- NOx emissions for the facility as of August 2021 were 15.47 tons based on a 12-month rolling time period as determined at the end of each calendar month.

Hazardous Air Pollutant (HAP) emissions from the facility are not to exceed 9 tons per year on any individual HAP not 22.5 tons per year for total HAPs. Pursuant to Appendix A of the PTI, as the facility pulls gas only from Antrim formations, HAPs need not be calculated as natural gas produced from this formation does not contain HAPs.

Certain process parameters are required to be recorded by Denergy at this site. They include:

- Fuel Consumption – This is being recorded and averaged 84.2 million cu. ft. per year based on a 12-month rolling time period as of August 2021.
- Crude/Condensate throughput – this facility does not process crude oil or condensate. Denergy included a statement to this in their records response.
- Monthly hydrocarbon liquids trucked – this facility does not loadout and truck any liquids. Denergy included a statement to this in their records response and no loadout equipment was noted on inspection of the facility.
- Glycol circulated through the glycol dehydrator – The glycol circulation rate set point on the dehydrator is 2.004 gallons per minute.
- Oil and gas processed – No crude oil is processed at this facility. Denergy included a statement to this in their records response. Natural gas processed at the facility averages approximately 56.0 million cubic feet per month and 667.7 million cubic feet for the 12 months prior to August 2021.

Denergy indicated in a statement provided as part of their records response that at no time was any engine operated while bypassing installed catalytic control.

Emissions from this facility are required to be reported to MAERS annually. In the past, the management company in charge of this facility, RCS Services, has had issues with this requirement resulting in enforcement actions. Since the change to Denergy in 2019, this issue has been reconciled. This reporting has been completed, reviewed, and documented by AQD staff.

Records of maintenance activities at this facility are being kept. These records are summarized in a spreadsheet that was included in the records submission. Of note in these records, the catalyst for Unit 824S was changed out in July of 2021. There is no indication of catalyst replacement in Unit 1285 in the last 12 months.

AST size at the facility is limited to 952 barrels per AST. As stated above, all tanks at the facility are below this capacity. Additionally, these tanks are exempt from permitting under Rule 336.1284(2)(e).

This facility is currently not subject to 40 CFR 60 Subpart KKK as no natural gas liquids are processed. Denergy included a statement to this in their records response.

No stack testing has been required to be performed at this facility in the last 12 months and is currently not recommended. Calculated emissions are well below emission limitations and there is no reason to suspect otherwise.

The wells feeding the natural gas used at this facility are from the Antrim formation. Denergy included a statement to this in their records response. Natural gas extracted from this formation is considered "sweet" by definition.

At the time of the inspection, this facility was in compliance with the facility opt out permit. No further action is recommended.

NAME 

DATE _____

SUPERVISOR _____