

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

N748270474

FACILITY: LAYLINE OIL & GAS LLC - GOOSE LAKE FACILITY		SRN / ID: N7482
LOCATION: 17 MILE RD, LEROY		DISTRICT: Cadillac
CITY: LEROY		COUNTY: OSCEOLA
CONTACT: Coral Johnson , Administrative Assistant		ACTIVITY DATE: 12/13/2023
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of this opt out source.		
RESOLVED COMPLAINTS:		

The Layline Energy Goose Lake is a natural gas and natural gas liquid processing facility located in Osceola County. This facility processes natural gas from the PDC zone through drying using a glycol dehydrator and compression. There is also a refrigeration unit on site for condensing and collection of natural gas liquids. The permit regulating this facility is Permit to Install (PTI) number 220-05. This PTI is atypical of other oil and gas opt out source permits in that there are no emission limits for any of the equipment on site. Specifically, there are conditions to calculate VOC emissions from the dehy, but no emission limits for VOC. There are two engines on site but only conditions for a Malfunction Abatement Plan and corresponding maintenance records. The permit is silent on NOx and CO emissions from each engine. Finally, there is a requirement for the facility to comply with 40 CFR 60 Subpart KKK for processing of natural gas liquids, but there are no supporting conditions regarding that.

I inspected this facility with respect to Permit to Install (PTI) number 220-05. Following are the findings of this inspection.

Following is a list of pertinent equipment noted on site:

- Engine 1, Waukesha I-6 Engine without catalytic controls
- Engine 2, Two-cylinder Ajax engine without catalytic controls
- One small glycol dehy(exempt per Rule 288(2)(b)(i))
- One flare, emergency, not in operation at the time of the inspection (exempt per Rule 288(2)(c))
- Four 400 bbl AST's, one 200 bbl AST, and one 30k gallon AST (all exempt per Rule 284(2)(b)).
- Two process heaters (exempt per Rule 282(2)(b)(i))

EUDEHY

Emission Limits

NA

Material Limits

NA

Process or Operational Restrictions

NA

Design or Equipment Parameters

NA

Testing

An analysis of the wet gas stream is to be performed at least annually. The most recent gas stream analysis was submitted. Following are the analytical results:

Hydrocarbon Content	
Parameter	% by weight
Nitrogen	12.84

Carbon Dioxide	0.22
Methane	80.81
Ethane	3.37
Propane	0.67
Isobutane	0.39
n-butane	0.29
Isopentane	0.26
n-Pentane	0.1
i-Hexanes	0.24
n-Hexane	0.08
Benzene	0.005
Cyclohexane	0.01
i-Heptanes	0.33
n-Heptane	0.08
Toluene	0.03
i-Octanes	0.09
n-Octane	0.04
Ethylbenzene	0.01
Xylenes	0.02
i-Nonane	0.05
n-Nonane	0.02
i-Decanes	0.06
n-Decane	ND
Undecanes	ND
Dodecanes	ND
Tridecanes	ND
Tetradecanes	ND
Other Analysis	
Molecular Weight (g/mol)	17.68
BTU Dry	964
BTU Wet	947
Hydrogen Sulfide (%)	ND

Recordkeeping/Reporting/Notification

VOC emission rates are to be calculated annually. VOC emissions are reported annually per MAERS. For the year 2022, VOC emissions were calculated to be 6.9 tons for the dehy.

Stack Restrictions

NA

Other

NA

FGENGINES

Emission Limits

NA

Material Limits

NA

Process or Operational Restrictions

The facility is required to have and follow an approved Malfunction Abatement Plan (MAP). The latest version of this plan is dated January 2006. This MAP should be updated to reflect the correct owners for the facility.

Design or Equipment Parameters

NA

Testing

NA

Recordkeeping/Reporting/Notification

Any maintenance activities for the engines are to be logged. For the reporting period, the facility provided receipts from all maintenance activities performed during the review period.

Stack Restrictions

NA

Other

NA

FGFACILITY**Emission Limits**

NA

Material Limits

Only sweet natural gas is to be consumed at this facility. Records supplied by the facility include a statement that only sweet gas is consumed. Additionally, gas analysis of a sample collected 12/12/2023 indicated no detectable hydrogen sulfide in the gas stream.

Process or Operational Restrictions

The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and KKK, as they apply.

- A plan for compliance with 40 CFR 60 Subpart KKK, Standards for Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants is required for the facility. A Leak Detection and Repair (LDAR) plan was received in December of 2017.
- Raw data field sheets demonstrating tagged components checked for leaks for the review period were submitted. These sheets are somewhat rough but appear to indicate no leaks at any of the tagged components.
- The facility is required to submit semi-annual reporting regarding requirements of Subpart KKK. These reports have been submitted and appear complete.

Design or Equipment Parameters

NA

Testing

Testing for H₂S and/or sulfur content of the natural gas burned at the facility may be requested. Gas analysis of a sample collected 12/12/2023 indicated no detectable hydrogen sulfide in the gas stream.

Recordkeeping/Reporting/Notification

NA

Stack Restrictions

NA

Other

NA

This facility appears in compliance with their applicable air permitting. They also appear to be in compliance with 40 CFR 60, Subpart KKK. Jodi Lindgren will be testing this facility pursuant to this subpart in the future and will make a separate compliance determination for Subpart KKK.

NAME DATE 1-31-24SUPERVISOR 