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

N748257345

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:** 01/26/2021
STAFF: Caryn Owens	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Onsite Inspection & Records Review		
RESOLVED COMPLAINTS:		

On Tuesday, January 26, 2021, Caryn Owens of the Department of Environment, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted an On-site field inspection of Layline Oil & Gas LLC (SRN: N7482) located on the south side of 17 mile Road in the northeast of the northwest portion of Section 11, T19N, R9W in Rose Lake Township, Osceola County, Michigan. The facility is located approximately ¼ mile east of the 140th Ave and 17 Mile Road intersection.

The field inspection and records review were to determine compliance with the permit to install (PTI) 220-05. Layline Oil & Gas LLC is considered an opt-out source from major source applicability due to PTI Condition 2.2 under Recordkeeping/Reporting/Notification in FGENGINES with regard to changing out an engine at the facility.

The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) from Oil and Natural Gas Production facilities (40 CFR, Part 63, Subpart HH), and NESHAP for Stationary Reciprocating Internal Combustion Engines in 40 CFR, Part 63, Subpart ZZZZ. The State of Michigan does not have delegated authority of these area source NESHAPs, and thus compliance with the federal requirements in accordance with the site was not reviewed by the AQD at the time of this report. Additionally, the source is subject to the New Source Performance Standards (NSPS) for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants in 40 CFR, Part 60, Subpart KKK. The equipment at the facility was installed at this location in 1992.

Summary:

The activities covered during the field inspection and records review for the facility indicates the following violation:

- Semiannual reports as required by 40 CFR 60.487 and 40 CFR 60.636(a) were not submitted to the AQD Cadillac District Office, since 2018.

In addition to the noted violation, AQD recommends updating both the Malfunction Abatement Plan (MAP) and Leak Detection and Repair (LDAR) Plan so they are specific to Layline Oil & Gas LLC. Specific permit conditions that were reviewed are discussed below.

On-site Inspection:

During the field inspection it was overcast with snow showers and winds approximately 10 to 15 miles per hour out of the northeast, and approximately 26 degrees Fahrenheit. Snow covered the ground during the inspection. The facility consisted of:

- a sealed 30,000-gallon natural gas liquids (NGL) horizontal storage tank, four 400 BBL tanks used to store condensate and one 210 BBL storage tank to store production water;
- a refrigeration area that consisted of a propane tank, a Waukesha compressor engine, a glycol dehydrator, a chiller, three-phase separator, and ancillary equipment;
- an Ajax compressor engine was located on the southeast side of the Property and two in-line heaters;
- and an emergency flare on the southwest portion of the Property.

At the time of the facility inspection the Waukesha was running approximately 807 revolutions per minute (RPMs) with no control. The stack to the engine was approximately 16 feet above ground surface, and no visible emissions or odors were observed.

Frost was observed on a portion of the piping in the refrigeration building and in the skid area of the system. The refrigeration skid also contained the glycol dehydrator unit. The glycol dehydrator stack was approximately 10 feet above ground surface. There was a combustion stack for the refrigeration unit approximately 20 feet above ground surface. No visible emissions were observed from the stacks. Near the control panel of the refrigeration skid, a slight odor was noted, however, the odor was not observed away from the unit.

The Ajax compressor was operating at a rate of 323 RPMs and the stack was located outside the west side of the building with no control. The stack height was approximately 16 feet above ground surface and a heat shimmer was observed, but no visible emissions or odors. Two in-line heaters were observed on the southeast portion of the site and each one contained one burner stack. AQD observed heat shimmers off the heater, but no odors or visible emissions.

An emergency flare was observed on the southwest portion of the site. No flame was observed during the inspection, but a heat shimmer from the flare's pilot was observed from the stack. The flare is permitted to be equipped with a 2,000 ft^3/day pilot.

Records Review:

EUDEHY: This emission unit is for a Glycol dehydration system processing gas from the Prairie duChein formation; contains a 500,000 BTU/hr natural gas fired burner.

- **Emission Limits:** There are no emission limits applicable for EUDEHY.
- **Material Limits:** There are no material limits applicable for EUDEHY.
- **Process/Operational Restrictions:** There are no process/operational restrictions applicable for EUDEHY.
- **Design/Equipment Parameters:** There are no design/equipment parameters applicable for EUDEHY.
- **Testing/Sampling:** The most recent gas analysis completed was on February 3, 2021.
- **Monitoring/Recordkeeping:** Based on the records reviewed, the VOC emission rate for the EUDEHY was reported at 6.98 tons/year.
- **Reporting:** Reporting requirements are not applicable for EUDEHY.
- **Stack/Vent Restrictions:** Stack/Vent restrictions are not applicable for EUDEHY.
- **Other Requirements:** Although the PTI does not address “Other Requirements” for EUDEHY, the facility is subject to the NESHAP from Oil and Natural Gas Production facilities (40 CFR, Part 63, Subpart HH). The State of Michigan does not have delegated authority of the area source NESHAP, and thus compliance with the federal requirements in accordance with the EUDEHY were not reviewed by the EGLE at this time.

FGENGINES: This flexible group consists of two natural gas fired reciprocating engines, EUENGINE1 and EUENGINE2. Both the engines use no control.

- **Emission Limits:** There are no emission limits applicable for FGENGINES.
- **Material Limits:** There are no material limits applicable for FGENGINES.

- **Process/Operational Restrictions:** The facility submitted a Malfunction Abatement Plan (MAP) on January 2006. It appears the MAP needs updating since it references Dart Oil & Gas Corporation. Based on review of the MAP and maintenance records, the engines are inspected and serviced approximately every couple months. The maintenance records indicate general maintenance such as: replacing filters, valves, spark plugs, was performed on the engine. The records did not show maintenance concerns with the engine, and Layline Oil & Gas Co. appears to be following the MAP for the facility. The records are attached.

- **Design/Equipment Parameters:** Design/Equipment Parameters are not applicable for FGENGINES.

- **Testing/Sampling:** Testing/Sampling requirements are not applicable for FGENGINES.

- **Monitoring/Recordkeeping:** Monitoring/Recordkeeping requirements are not applicable for FGENGINES.

- **Reporting:** The facility has not swapped out an engine at the facility since the previous inspection report.

- **Stack/Vent Restrictions:** Stack/Vent restrictions are not applicable for FGENGINES.

- **Other Requirements:** Although the PTI does not address applicable Other Requirements for FGENGINES, the facility is subject the NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ). Compliance with these federal requirements in accordance with the FGENGINES were not reviewed by the AQD at this time.

FGFACILITY: Includes all source-wide activities at the facility including equipment covered by grand-fathered equipment and exempt equipment. It should be noted that the portions of the facility that are subject to 40 CFR 60 Subpart KKK are the Waukesha compressor and associated process skid comprised of a chiller, three phase separator, and ancillary equipment.

I. Emission Limits: There are no emission limits applicable for FGFACILITY.

II. Material Limits: The facility shall only burn sweet gas at the facility. Based on the gas sample results of the facility, only sweet natural gas is burned at the site.

III. Process/Operational Restrictions: **AQD received a Leak Detection and Repair (LDAR) Plan dated July 30, 2013, revised December 17, 2013 for the facility. It appears the LDAR Plan needs updating since it references Dart Oil & Gas Corporation.**

IV. Design/Equipment Parameters: **No Design/Equipment Parameters are applicable to FGFACILITY conditions of the stationary source.**

V. Testing/Sampling: **Sampling and testing for the sulfur content of the natural gas is only required upon request by AQD staff. AQD requested a gas analysis, and based on the results, no hydrogen sulfide was detected.**

VI. Monitoring/Recordkeeping: **Based on review of the LDAR Plan and 40 CFR Part 60, Subpart KKK, AQD does not have record of the facility completing monthly LDAR inspections and a semi-annual LDAR report has not been submitted since January 29, 2018. AQD recommends reviewing and updating the LDAR Plan since it is outdated.**

VII. Reporting: **No Reporting requirements are applicable to FGFACILITY conditions of the stationary source.**

VIII. Stack/Vent Restrictions: **No Stack parameters are applicable to FGFACILITY conditions of the stationary source.**

IX. Other Requirements: **Although the PTI does not address applicable Other Requirements for FGFACILITY, the facility is subject to the NSPS for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants in 40 CFR, Part 60, Subpart KKK. Based on review of the facility files, the facility is not in compliance with the reporting and monitoring requirements of 40 CFR Part 60, Subpart KKK.**

NAME Cam Owens DATE _____ SUPERVISOR Shane Nixon 2021.07.22 15:47:35 -04'00'