

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

N616048113

<b>FACILITY:</b> Layline Oil & Gas LLC - Marion Gas Plant		<b>SRN / ID:</b> N6160
<b>LOCATION:</b> 18811 5TH AVE, MARION		<b>DISTRICT:</b> Cadillac
<b>CITY:</b> MARION		<b>COUNTY:</b> OSCEOLA
<b>CONTACT:</b> Matt Maciag , Field Foreman		<b>ACTIVITY DATE:</b> 11/14/2018
<b>STAFF:</b> Caryn Owens	<b>COMPLIANCE STATUS:</b> Non Compliance	
<b>SUBJECT:</b> Field Inspection and Records Review		<b>SOURCE CLASS:</b> SM OPT OUT
<b>RESOLVED COMPLAINTS:</b>		

On Wednesday, November 14, 2018, Ms. Caryn Owens of the DEQ-AQD inspected Layline Oil & Gas Co. – Marion Gas Plant located at 18811 5<sup>th</sup> Avenue in Marion Township, Osceola County, Michigan. More specifically the site is located on the west side of North 5<sup>th</sup> Avenue, approximately 0.2 miles south of 19 Mile Road and North 5<sup>th</sup> Avenue in Marion, Michigan. It is recommended to have a H2S monitor during the inspection. Even though the site is not a sour gas facility, there are three iron sponges located in the central portion of the site. The field inspection and records review were to determine compliance with permit to install (PTI) 719-96. The site is currently an area source of hazardous air pollutants and an opt-out source of criteria air pollutants that has opted out of being a major source by limiting the operational and/or production limits potential to emit (PTE) to be below the major source thresholds. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart HH, and NESHAP 40 CFR Part 63 Subpart ZZZZ. However, the State of Michigan does not have delegated authority of the area source NESHAPs, and thus these areas were not reviewed by the DEQ at this time. It should be noted that the site is not Subject to the New Source Performance Standards (NSPS) for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and/on/or Before August 23, 2011 in 40 CFR Part 60 Subpart KKK, since the associated equipment was reportedly installed prior to 1984 at the site.

#### Evaluation Summary

Based on the activities covered during this field inspection and records review, the facility is in non-compliance with PTI 719-96. Review of the records indicates the facility was in compliance with emission limits in accordance with the current PTI, however AQD is waiting on analytical results to show compliance with Material Limits. A Violation Notice was submitted February 19, 2019. Please refer to the Violation Notice for more details.

#### On-site Inspection:

During the field inspection it was partly sunny and approximately 19 degrees Fahrenheit, with calm winds from the west. Snow covered the ground during the inspection. This facility was constructed to separate Natural Gas Liquids (NGL) from gas prior to entering the pipeline. There was a worker's trailer on the eastern portion of the site, and two storage buildings on the northern portion of the site. The remainder of the facility consists of the following equipment:

- A tank battery on the northeastern portion of the site with 2 pressurized NGL tanks with associated truck loading station, and an approximate 300 barrel (bbl) above ground storage tank.
- A tank battery on the northern portion of the site with 1 approximate 400 barrel above ground storage tank and associated loading station.
- Three iron sponges just north of the compressor building.
- One heater, just west of the production equipment.
- There was one glycol dehydrator to remove water from the natural gas stream, which was operating at the time of the inspection. The glycol dehydrator did not have a control device and condensation was being collected in an open stock tank beneath a shed type roof.
- The compressor building contained one compressor engine in the eastern portion of the building. I could not find a tag or information on what type of engine it was, but based on the records received, the engine was Caterpillar G342, 225 horsepower, rich burn uncontrolled engine. At the time of the inspection, the

engine was operating at 914 revolutions per minute (RPMs), 50 pounds per square inch (psi) and 160 degrees Fahrenheit. The engine appeared to have a catalyst, but there was no readout for the catalyst temperatures. The stack height appeared to be approximately 18 feet above ground surface, and I observed a heat shimmer from the exit of the stack.

- NGL fractionation equipment appeared to be operating, and I saw the pipes just south of the compressor building covered with frost.
- A flare that was burning with a clean flame at the time of the inspection on the southern portion of the site. I did not observe visible emissions from the flare while I was conducting my field inspection.
- The western portion of the site consisted of warehouse storage equipment like piping, tanks, and containers as backup for other facilities that belong to Layline Oil & Gas Co.

### **PTI 719-96 Compliance Evaluation:**

- **Emission Limits:**  
The Emission Limits are 89 tons per year based on a 12-month rolling time period for Nitrogen Oxides (NOx), Carbon Monoxide (CO), and Volatile Organic Compounds (VOCs). Based on records from November 1, 2017 through October 31, 2018, the highest emissions reported were 22.266 tons of NOx per 12-month rolling time period, 37.489 tons of CO per 12-month rolling time period, and 0.298 tons of VOCs per 12-month rolling time period. The emissions were reported within the permitted limits.  
  
Additionally, the Emission Limits for hazardous air pollutants (HAPs) are less than 9 tons per year based on a 12-month rolling time period for an individual HAP, and less than 22.5 tons per year based on a 12-month rolling time period for aggregate HAPs. Based on the records reviewed, the HAP emissions were well below the permitted limits.
- **Material Limits:**  
AQD requested hydrogen sulfide records from the company but was unable to obtain the results within the requested timeframe. AQD submitted a Violation letter to the Company on February 19, 2019 to obtain the hydrogen sulfide records.
- **Process Operational Restrictions:**  
The facility submitted a Malfunction Abatement Plan (MAP) on August 2005. Based on review of the MAP and maintenance records, the engine appears to be inspected properly. The maintenance records indicate general maintenance such as: replacing filters, valves, spark plugs, was performed on the engine. No catalytic converter information was observed in the maintenance records. 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:**  
The engine does not appear to be using a control device. The two NGL tanks are under pressure and use appropriate control for the tanks.
- **Testing/Sampling:**  
The facility uses engine specific emission factors to calculate the emissions for NOx, CO, VOC, and HAP emissions. Performance testing has not been completed at this facility.
- **Monitoring/Recordkeeping:**  
The facility records monthly and 12-month rolling time period calculations for NOx, CO, VOCs and HAPs. The 12-month rolling time period emissions are discussed above, under Emission Limits. The facility also monitors and records the natural gas usage on a monthly and 12-month rolling time period basis. The facility maintains a log of all significant activities at the facility. The monthly and 12-month rolling time period records are attached.
- **Reporting:**  
The 2017 MAERS report was reviewed and was complete, it also indicated compliance with the emission limits.
- **Stack/Vent Restrictions:**

There are no stack/vent restrictions in the permit to install.

**Other Requirements:**

Although the PTI does not address "Other Requirements" for EUENGINE, the facility is subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ) and 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 NESHAPs, and thus compliance with the federal requirements in accordance with the facility were not reviewed by the DEQ at this time.

NAME Camryn Owens

DATE 2/19/19

SUPERVISOR SW