

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

B566732367

FACILITY: MERIT ENERGY CO. - OTSEGO 6 CPF		SRN / ID: B5667
LOCATION: LYNN LAKE RD SEC 6 OTSEGO LAKE TWP, GAYLORD		DISTRICT: Cadillac
CITY: GAYLORD		COUNTY: OTSEGO
CONTACT: Sean Craven , Regulatory Analyst		ACTIVITY DATE: 11/10/2015
STAFF: Shane Nixon	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On site inspection and records review		
RESOLVED COMPLAINTS:		

AQD staff traveled to Otsego County with the intent to perform an inspection of the Otsego Lake 6 CPF. The purpose of the inspection was to determine the facility's compliance with Permit to Install No. 442-99B.

This facility consists of six storage tanks equipped with a vapor recovery unit, six process heaters, two iron sponges, a glycol dehydrator, and a compressor engine. Vapors from the glycol dehydrator and vapor recovery unit are piped to a flare on-site for destruction. The flare was operating at the time of the inspection. Visible emissions appeared to be approximately 10% opacity.

**EUDEHY - Glycol dehydration system processing gas from the Niagaran formation.**

1. **EMISSION LIMITS - There are no emission limits associated with this emission unit; therefore, this section is not applicable.**
2. **MATERIAL LIMITS - There are no material limits associated with this emission unit; therefore, this section is not applicable.**
3. **PROCESS/OPERATIONAL LIMITS - A compliance determination for 40 CFR 63 Subpart HH for the glycol dehydrator was not made at this time as the MDEQ does not have delegation of authority to enforce the subpart.**
4. **EQUIPMENT RESTRICTIONS - The dehydrator is required to have a flash tank and flare installed and operating. At the time of the inspection, staff observed a flash tank. Based on AQD staff observations, vapors from the flash tank are routed to the flare for destruction.**
5. **TESTING - Sampling and analysis of the wet gas stream is required once per calendar year. The most recent analysis (July 2015) was submitted upon AQD request.**
6. **MONITORING - There are no monitoring requirements associated with this emission unit; therefore, this section is not applicable.**
7. **RECORDKEEPING/REPORTING/NOTIFICATION - Records of the wet gas composition was available upon request (attached).**
8. **STACK/VENT RESTRICTIONS - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.**

**EUENGINE1 - Caterpillar G3306 (serial number G6X08059) compressor engine. Engine operating parameters recorded during the inspection follow:**

Operating rate: 1,141 rpm

Engine oil pressure: 65 psi

1. **EMISSION LIMITS - NOx emissions from the compressor engine are limited to 83.2 tons per year**

based on a 12 month rolling time period. Emission calculations submitted by Merit Energy indicates that the highest emissions occurred in October 2014. The 12 month rolling time period emissions during that month was 21.15 tons per year, which is in compliance with the emission limit.

2. **MATERIAL LIMITS** - Natural gas usage for the compressor engine is limited to 19 MMCF based on a 12 month rolling time period. Similar to the emissions, the highest usage occurred in October 2014 and the amount was 5.0 MMCF.

3. **PROCESS/OPERATIONAL LIMITS** - A revised malfunction abatement plan/preventative maintenance plan (PM/MAP) was submitted by Merit Energy in November 2013 for the compressor engine and was approved by AQD staff in January 2014.

4. **EQUIPMENT RESTRICTIONS** - The compressor engine is not equipped with any pollution control devices; therefore, the conditions in this section do not apply.

5. **TESTING** - NOx emission testing is required upon request by AQD staff. AQD staff have not requested testing to verify NOx emissions at this time.

6. **MONITORING** - As per the requirements of the Permit to Install, natural gas usage is monitored and recorded on a monthly basis.

7. **RECORDKEEPING/REPORTING/NOTIFICATION** - Records of compressor engine maintenance, monthly fuel usage, and emission calculations were available upon request (attached). AQD staff determined the records to be complete based upon review.

AQD staff review of the facility files indicate a compressor engine change out occurred in October 2013. The current engine replaced a Caterpillar 3408TA and notification pursuant to conditions of the PTI was submitted to AQD staff.

8. **STACK/VENT RESTRICTIONS** - The engine stack height was not consistent with the parameter listed in the PTI. AQD did not have equipment to measure the stack parameters during the inspection, however, AQD staff contacted Merit Energy to verify the stack parameters and take corrective actions, if necessary.

**FGFACILITY** - All process equipment at the facility including equipment covered by other permits, grand fathered equipment and exempt equipment.

1. **EMISSION LIMITS** - NOx emissions are limited to 89 tons per year based on a 12 month rolling time period. Records indicate that the highest 12 month rolling emissions of 24.44 tons occurred in October 2014.

2. **MATERIAL LIMITS** - Sweet natural gas is the only fuel burned at the facility. A gas analysis in July 2015 indicates that the hydrogen sulfide content of the fuel burned is less than 1 ppm, which is considered sweet.

3. **PROCESS/OPERATIONAL LIMITS** - There are no process or operational limits associated with this flexible group; therefore, this section is not applicable.

4. **EQUIPMENT RESTRICTIONS** - There are no equipment restrictions associated with this flexible group; therefore, this section is not applicable.

5. **TESTING** - Testing of the hydrogen sulfide content of the fuel was requested by the AQD. The company complied with the requirement by submitting test results obtained in July 2015.

6. **MONITORING** - There are no monitoring requirements associated with this flexible group; therefore, this section is not applicable.

7. RECORDKEEPING/REPORTING/NOTIFICATION - Monthly and 12 month rolling NOx emission calculations were submitted to AQD staff upon request (attached).

8. STACK/VENT RESTRICTIONS - There are no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.

CONCLUSION - Based upon the onsite inspection and records review, AQD staff considers the facility to be in compliance with Permit to Install No. 442-99B.

NAME Shane Nixon

DATE 12/3/15

SUPERVISOR 