

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

N608632445

FACILITY: Merit Energy Company - Charlton 28 CPF		SRN / ID: N6086
LOCATION: Sparr Rd, JOHANNESBURG		DISTRICT: Cadillac
CITY: JOHANNESBURG		COUNTY: OTSEGO
CONTACT: Sean Craven , Regulatory Analyst		ACTIVITY DATE: 11/10/2015
STAFF: Shane Nixon	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On site inspection and records review		
RESOLVED COMPLAINTS:		

AQD staff traveled to Otsego County to perform an inspection of the Charlton 28 CPF. The purpose of the inspection was to determine the facility's compliance with Permit to Install (PTI) No. 644-96A. The facility consisted of a glycol dehydrator, four storage tanks equipped with vapor recovery, six process heaters, and a compressor engine. No visible emissions were observed from any fuel burning equipment at the time of the inspection.

EUDEHY - Glycol dehydration system processing natural 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 - There are no process or operational limits associated with this emission unit; therefore, this section is not applicable.**
4. **Equipment Restrictions - As required by the PTI, the dehydrator is equipped with a flash tank. Vapors from the flash tank are routed to the compressor for destruction.**
5. **Testing - Analysis of the wet gas stream was conducted in July 2015 for the compounds listed in the PTI. A copy of the analysis was submitted to AQD upon request.**
6. **Monitoring - There are no monitoring requirements associated with this emission unit; therefore, this section is not applicable.**
7. **Recordkeeping/Reporting/Notification - As previously stated, records of the wet gas composition was available for AQD review.**
8. **Stack/Vent Restrictions - The stack associated with the glycol dehydrator appeared consistent with the parameters listed in the PTI.**

EUCH28CMPENG1 - Waukesha F3521GSI compressor engine. Operating parameters recorded by AQD staff at the time of the inspection follow:

Operating rate: 601 rpm

Engine oil pressure: 45 psi

Engine oil temperature: 160°F

1. **Emission Limits - NOx emissions from the compressor engine are limited to 87 tons per 12 month rolling time period. Records submitted by Merit Energy indicates the highest emissions was 33.53 tons per 12 month rolling time period, which occurred in November 2014.**

2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.

3. Process/Operational Limits - The engine is not allowed to operate unless a preventative maintenance/malfunction abatement plan (PM/MAP) is implemented and maintained. Review of AQD facility files indicates the PM/MAP was submitted to AQD in September 2007. There are no records of revisions submitted to AQD.

4. Equipment Restrictions - There are no applicable equipment restrictions associated with this emission unit as the engine is not equipped with a catalyst.

5. Testing - Verification of NOx emissions is required upon AQD request. At this time, AQD has determined that testing is not necessary.

6. Monitoring - Natural gas usage is monitored on a continuous basis per the requirements of the PTI.

7. Recordkeeping/Reporting/Notification - Records of maintenance activities conducted on the engine submitted to AQD indicates preventative maintenance was performed according to the PM/MAP.

Monthly fuel use records, monthly NOx emission calculations, and 12 month rolling NOx emission calculations were submitted to AQD for review. AQD staff review determined the records complete and demonstrate compliance with the recordkeeping requirements.

8. Stack/Vent Restrictions - The stack appeared less than the minimum of 20 feet above ground level per the conditions of the PTI. AQD staff did not have the equipment necessary to measure the stack height. Instead, AQD staff brought the issue to Merit Energy's attention and informed Merit Energy to take corrective action, if necessary.

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

1. Emission Limits - NOx and VOC emissions are limited to 89 tons per 12 month rolling time period and 40 tons per 12 month rolling time period, respectively. Records indicate the highest NOx emissions was 33.88 tons per 12 month rolling time period in November 2014. The highest VOC emissions was 5.61 tons per 12 month rolling time period with occurred in November 2014.

2. Material Limits - Per the requirements of Condition 3.2 of the PTI, the facility is not allowed to burn sour natural gas. The gas analysis submitted by Merit Energy for the fuel burned at the facility indicates the hydrogen sulfide concentration of the natural gas is 20 ppm and is considered sour. Based upon the records submitted, the facility is not in compliance with the condition in the PTI. A violation notice will be sent to the company for noncompliance.

The facility is limited to not burning more than 21,500,000 standard cubic feet of natural gas per 12 month rolling time period in the compressor engine and not more than 59,800,000 standard cubic feet of natural gas per 12 month rolling time period at the facility. Records submitted by Merit Energy indicates the highest fuel usage occurred in March 2015. At that time, the compressor burned 8,300,000 cubic feet per 12 month rolling time period and the facility burned a total of 15,800,000 standard cubic feet per 12 month rolling time period.

3. Process/Operational Limits - The facility is required to comply with the National Emission Standard for Hazardous Air Pollutants, 40 CFR 63, Subpart HH as it applies to the facility. Currently, AQD has not been delegated regulatory authority to enforce the federal regulation and compliance with the regulation was not determined.

4. Monitoring - There are no monitoring requirements associated with the flexible group; therefore, this section is not applicable.

5. Testing - There are no testing requirements associated with the flexible group; therefore, this section is not applicable.
6. Equipment Restrictions - There are no equipment restrictions associated with this flexible group; therefore, this section is not applicable.
7. Recordkeeping/Reporting/Notification - Monthly and 12 month rolling time period calculations of NOx and VOC calculations were submitted to AQD upon request. AQD staff determined the records to be complete based upon their review.
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 on site inspection and records review, AQD staff has determined the facility is not in compliance with PTI No. 644-96A. Specifically, the facility is burning sour gas and is a noted violation of condition 3.2. AQD will send a violation notice to Merit Energy.

NAME Shane Nixon

DATE 12/9/15

SUPERVISOR 