

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

B914232264

FACILITY: Merit Energy Company - CHARLTON 12		SRN / ID: B9142
LOCATION: 0000 HEATHERTON RD, JOHANNESBURG		DISTRICT: Cadillac
CITY: JOHANNESBURG		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 to perform an inspection of the Charlton 12 CPF. The purpose of the inspection was to determine the facility's compliance with Permit to Install (PTI) No. 53-04A and applicable state and federal air pollution control regulations. Equipment at the facility consisted of five storage tanks equipped with a vapor recovery unit, a glycol dehydrator, two Waukesha 12-cylinder compressor engines (each equipped with a three-way catalyst), four heaters, and a flare. A remediation trailer was also present at the site in which Mr. Sean Craven indicated an extensive remediation project was planned to occur in 2016. At the time of the inspection only one of the compressor engines was operating. Per Merit staff, the flare is used during compressor blow downs.

EUDEHY - Glycol dehydrator used for removing water from the natural gas stream.

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 - The dehydrator is <sup>not</sup> allowed to operate unless a flare, condenser, or equivalent air pollution control device is installed and operating properly. Currently, the facility uses a flash tank and vapor recovery unit to control VOCs from the dehydration process. Based upon comparable control efficiencies of a flare or condenser, AQD staff considers the VRU to be an acceptable pollution control device.
5. Testing - There are no testing requirements associated with this emission unit; therefore, this section is not applicable.
6. Monitoring - There are no monitoring requirements associated with this emission unit; therefore, this section is not applicable.
7. Recordkeeping/Reporting/Notification - There are no recordkeeping, reporting, or notification requirements associated with this emission unit; therefore, this section is not applicable.
8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this emission unit; therefore, this section is not applicable.

FG-CH12COMPS - Two Waukesha L7042 GSI compressor engines, each equipped with catalytic control. As previously mentioned, only one of the compressor engines was operating at the time of the inspection. Operating parameters recorded during the inspection follows:

Engine oil pressure: 40 psi

Engine oil temperature: 170°F

**Catalyst inlet temperature: 837°F**

**Catalyst outlet temperature: 842°F**

- 1. Emission Limits - There are no emission limits associated with this flexible group; therefore, this section is not applicable.**
- 2. Material Limits - There are no material limits associated with this flexible group; therefore, this section is not applicable.**
- 3. Process/Operational Limits - The compressor engines are not allowed to operate unless a preventative maintenance/malfunction abatement plan (PM/MAP) is implemented and maintained. The PM/MAP was submitted in January 2009 and was approved by AQD in February 2009. A revision was submitted in February 2013 to reflect a change in the catalyst inlet and outlet temperatures determined by testing. Records indicate that regular maintenance is performed on the compressor engine and catalyst in accordance with the PM/MAP.**
- 4. Equipment Restrictions - The engines are not allowed to operate unless 3-way catalysts are installed, maintained and operated in a satisfactory manner. As mentioned previously, only one of the compressor engines was operating at the time of the inspection. The inlet and outlet catalyst temperatures was consistent with the PM/MAP. Furthermore, maintenance records and differential pressure and temperature testing records were made available to AQD upon request. AQD has determined the catalysts are maintained based upon review of the records.**
- 5. Monitoring - AQD staff observed devices which continuously monitor the natural gas usage of the engines during the inspection.**
- 6. Testing - There are no testing requirements associated with this flexible group; therefore, this section is not applicable.**
- 7. Recordkeeping/Reporting/Notification - Monthly natural gas usage records and a log of maintenance activities were made available upon request. AQD staff determined the records complete based upon review.**
- 8. Stack/Vent Restrictions - There are no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.**

**FG-FACILITY - All process equipment at the facility including equipment covered by other permits, grandfathered equipment and exempt equipment.**

- 1. Material Limits - NO<sub>x</sub> emissions are limited to 89 tons per 12 month rolling time period. Records provided by Merit Energy indicates the highest emissions, which occurred in September 2014, was 6.87 tons per 12 month rolling time period.**
- 2. Material Limits - Sweet natural gas is the only fuel allowed to be burned at the facility. An analysis of the fuel submitted by the company indicates the hydrogen sulfide concentration is non-detectable.**

**The natural gas usage limit is restricted to 120 million cubic feet per 12 month rolling time period. Records submitted by Merit Energy indicates the highest usage was 39.3 million cubic feet for the 12 month rolling time period ending September 2014.**

- 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 - There are no testing requirements associated with this flexible group; therefore, this section is not applicable.

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

7. Recordkeeping/Reporting/Notification - NOx emission calculations and natural gas usage records were provided to AQD upon request. AQD staff reviewed the records and were determined to be complete.

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 to be in compliance with PTI No. 53-04A.**

NAME Shawn Wilson

DATE 12/7/15

SUPERVISOR 