

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

B916144415

FACILITY: Merit Energy Co. - Mayfield 16		SRN / ID: B9161
LOCATION: HARRAND RD, MAYFIELD		DISTRICT: Cadillac
CITY: MAYFIELD		COUNTY: GRAND TRAVERSE
CONTACT: Vicki Kniss , Environmental Affairs Manager		ACTIVITY DATE: 05/16/2018
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2017 FCE.		
RESOLVED COMPLAINTS:		

Full Compliance Evaluation: B9161 MEC Mayfield 16, Grand Traverse County

I conducted a Full Compliance Evaluation (FCE) of the Mayfield 16 to determine compliance with Permit to Install number 634-96B and the air pollution control Rules. I observed the site Prior to entering the facility, no odors were detected downwind and no visible emissions were present. The weather was clear, 61 degrees F with wind from the South at 10 mph. At the time of the inspection the following equipment was observed on site:

- Eight 400 bbl AST's with vapor recovery
- One Waukesha V-12 compressor engine with no control
- One glycol dehydrator
- Six heaters, none of which appeared to be operating.

Records regarding this facility were requested on 5/17/2018 and received on 5/21/2018. The records were for the most recent 12-months rolling time-period and appeared complete.

EUMF16-DH - Triethylene glycol dehydration system. Equipped with a flash tank and condenser.

I. EMISSION LIMITS – No emissions limits

II. MATERIAL LIMITS – No material limits

III. PROCESS/OPERATIONAL RESTRICTIONS

1. This EU is required to be in compliance with all provisions of 40 CFR 60 Subpart HH. MEC meets the exemption criteria for natural gas flowrate.

IV. DESIGN/EQUIPMENT PARAMETERS

1. The dehydrator was equipped with a flash tank as required by the permit.
2. The dehydrator was equipped with a condenser as required by the permit.

V. TESTING/SAMPLING

1. A wet gas analysis of the gas coming in to the EU is required once per year. The most recent analysis, dated 5/7/2018, is attached to this report.

VI. MONITORING/RECORDKEEPING

1. The facility is required to perform emissions calculations for this EU monthly. Review of records provided with the 2017 MAERS submittal indicates emissions calculations for the facility have been performed on a monthly basis.
- 3, 4. Subpart HH, 40 CFR 63.764(e)(1)(i) exemption criteria for glycol dehydrators, records of natural gas throughput (85,000 cubic meters per day) or benzene emissions (0.90 Megagrams (1,984 pounds per year). The records indicate total VOC emissions were 1,201 pounds per year for 2017.
5. A wet gas analysis of the gas coming in to the EU is required once per year. As indicated above the testing has been completed.

VII. REPORTING

1. The facility is required to submit notifications and reports for this EU pursuant to the MACT. MACT notification for this EU was received on 1/31/11. No additional reporting is required.

VIII. STACK/VENT RESTRICTIONS

1. This stack appears in compliance with criteria listed in the permit and does not appear to have been recently altered.

IX. OTHER REQUIREMENTS— No other requirements.

EUMF16-CM1 - Natural gas fired reciprocating engine with no controls

I. EMISSION LIMITS

1. NOx emissions are limited to 85.3 tons per year based on a twelve-month rolling period. Records provided by the facility indicate that NOx emissions average 14.95 tpy, based on a 12-month rolling time-period as of December 2017.

II. MATERIAL LIMITS

1. The natural gas usage for the compressor engine is limited to 19.3 million cubic feet per 12-month rolling time-period as determined at the end of each calendar month. Records submitted by the facility indicate natural gas usage was 3.4 million cubic feet per 12-month rolling time period as determined at the end of December 2017.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The Malfunction Abatement Plan for this EU was most recently updated and approved on 6/25/14.
2. The facility is not allowed to bypass any control device for this EU for more than 200 hours per year. The compressor does not have an add-on control device. Therefore, this condition does not apply.

IV. DESIGN/EQUIPMENT PARAMETERS

1. The facility must maintain a control device for this EU if used. The compressor does not have an add-on control device. Therefore, this condition does not apply.
2. The facility is required to maintain a device to measure natural gas usage for this EU. This device was in place and operating.

V. TESTING/SAMPLING

1. NOx emissions testing is at the request of the AQD. As of the date of the inspection, testing has not been requested.

VI. MONITORING/RECORDKEEPING

1. The facility is required to perform emissions calculations monthly. Review of submitted records indicates emissions calculations for the facility have been performed in a timely and correct manner.
2. A maintenance log for this EU is required to be maintained. The records for 2017 are attached.
3. The facility is required to keep records of any bypass of any control device. The compressor does not have an add-on control device. Therefore, this condition does not apply.
4. Natural gas usage records for this EU are required to be maintained and included with the monthly emission summary of which a copy is attached.
5. NOx emissions records for this EU are required to be kept. These are being performed monthly in a satisfactory manner and copies are attached.

VII. REPORTING

1. The facility is required to notify the agency if the compressor engine is replaced. As of the date of the inspection, the engine has not been replaced.

VIII. STACK/VENT RESTRICTIONS

1. Stack parameters for this unit do not appear to have changed and appear correct.

IX. OTHER REQUIREMENTS

1. There are no "Other" requirements.

FGFACILITY

I. EMISSION LIMITS

1. NOx emissions are limited to 89.9 tons per year based on a twelve-month rolling period. Records provided by the facility indicate that NOx emissions average 16.24 tons, based on a 12-month rolling time-period as of December 2017.

II. MATERIAL LIMITS

1. The facility is required to only burn sweet natural gas. An attached analysis of the gas indicates hydrogen sulfide is non-detectable at a detection limit of 1 ppm.

III. PROCESS/OPERATIONAL RESTRICTIONS – No process or operational restrictions.

IV. DESIGN/EQUIPMENT PARAMETERS– No design or equipment restrictions

V. TESTING/SAMPLING

1. Verification of H2S and/or sulfur content of the natural gas burned in may be required upon request by the AQD District Supervisor. This verification was supplied with the required wet natural gas analysis.

VI. MONITORING/RECORDKEEPING


- 1, 2. The facility is required to perform emissions calculations monthly. Review of submitted records indicates emissions calculations for the facility have been performed in a timely and correct manner.

VII. REPORTING– No reporting requirements.

VIII. STACK/VENT RESTRICTIONS – There are no stack restrictions

IX. OTHER REQUIREMENTS – No other requirements

At the time of the inspection, this facility was in compliance with PTI 634-96B and the Air Pollution Control Rules.

NAME 

DATE 5-21-18 SUPERVISOR 