

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

N699932696

FACILITY: Merit Energy Co. Mayfield 28		SRN / ID: N6999
LOCATION: Mayfield TWP, MAYFIELD		DISTRICT: Cadillac
CITY: MAYFIELD		COUNTY: GRAND TRAVERSE
CONTACT: Vickie Kniss , Regulatory Affairs		ACTIVITY DATE: 12/09/2015
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of this opt out source.		
RESOLVED COMPLAINTS:		

Inspected this opt out source per Permit to Install (PTI) number 219-01C. Prior to entering the facility, no odors or visible emissions were noted. GPS Coordinates, 44.5390, 85.6458.

**Equipment on site included:**

One small glycol dehydrator

Four exempt AST's, three of which have vapor recovery (3-400 bbl, 1-200bbl)

In shack H2S warning system which appears to be operational

Large V-12 Waukesha Compressor Engine without control

The records submitted as part of this inspection include mention of another compressor engine on site. However, there exists only one engine on site and Permit 219-01C issued in March of 2009 has conditions for only one engine.

Following are the findings of the inspection by permit special condition. All required records were reviewed and some are attached to this report.

**EUDEHY**

**I. EMISSION LIMITS - NA**

**II. MATERIAL LIMITS -NA**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The dehy is required to be in compliance with 40 CFR 63, Subpart HH by 1/2009. Pursuant to 40 CFR 63.764(e)(1)(i), the dehy appears to be exempt from this Subpart because production at it is less than 85,000 cu. meters per day.

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The facility is required to not operate the dehy unless the reboiler vent is plumbed to the vapor recovery system. The dehy appears to be configured in this manner.

2. The facility is required to not operate the dehy unless the flash tank vent is plumbed to the vapor recovery system. The dehy appears to be configured in this manner.

**V. TESTING/SAMPLING**

1. The facility is required to analyze the gas used at least once per year for various parameters used to calculate emissions from the facility. The last sampling of this gas was completed in June of 2015 and a copy of the analysis is attached.

**VI. MONITORING/RECORDKEEPING**

1. Required calculations are to be completed by the facility by the last day of the calendar month for the previous calendar month. The calculations appear correct and were available in a timely manner.

2. If the dehy meets the exemption criteria in 40 CFR 63.764(e)(1)(i):

- a) The facility is required to install a device to measure the gas process by the dehy. This device is installed
  - b) The facility is required to keep records of the daily throughput of the dehy. These records are being kept in a satisfactory manner and are attached to this report
  - c) and d) As an alternative to complying with exemption criteria the facility has the option to track benzene emissions to demonstrate exemption from Subpart HH. This facility has chosen to not exercise this option.
3. The facility is required to analyze the gas used at least once per year for various parameters used to calculate emissions from the facility. The last sampling of this gas was completed in June of 2015 and a copy of the analysis is attached.
  4. If the dehy meets the exemption criteria in 40 CFR 63.764(e)(1)(i), the facility shall keep records of actual natural gas flow rates. These records are being kept and appear complete.
  5. As an alternative to complying with exemption criteria the facility has the option to track benzene emissions to demonstrate exemption from Subpart HH. This facility has chosen to not exercise this option.

## VII. REPORTING

1. The facility is required to submit reporting pursuant to 40 CFR 63.775. However, the dehy meets the exemption criteria in 40 CFR 63.764(e)(1)(i). Therefore, this reporting is not required.

## VIII. STACK/VENT RESTRICTIONS -NA

## IX. OTHER REQUIREMENTS -NA

### EUENGINE1

#### I. EMISSION LIMITS

1. NOx emissions from this engine are limited to 87.6 tons per year based on a 12-month rolling time period determined at the end of each calendar month. NOx emissions from October 2014 to October 2015 were 32.73 tons per year based on a 12-month rolling time period determined at the end of each calendar month.

#### II. MATERIAL LIMITS

1. The natural gas usage for the engine shall not exceed 26 million cubic feet per 12-month rolling time period as determined at the end of each calendar month. Natural gas usage for the engine from October 2014 to October 2015 was 9.6 million cubic feet per 12-month rolling time period as determined at the end of each calendar month

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. This facility is required to have an approved malfunction abatement plan. The plan for this facility was submitted on March 31, 2009 and was approved on April 30, 2009. A review of maintenance records indicates compliance with this MAP.
2. The facility is required to keep records of when the engine is run without the add on control device. The compressor engine on site is not controlled therefore this condition does not apply

#### IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any engine that contains an add-on control device unless that device is installed, maintained, and operated in a satisfactory manner, except as specified in SC III.2. The compressor engine on site is not controlled therefore this condition does not apply
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to

monitor the natural gas usage for the engine on a continuous basis. This device is installed and appears to be operating correctly.

#### V. TESTING/SAMPLING

1. Testing to verify NOx emissions may be required. As of the date of the inspection, this testing has not been requested and is not recommended at this time.

#### VI. MONITORING/RECORDKEEPING

1. Required calculations are to be completed by the facility by the last day of the calendar month for the previous calendar month. The calculations appear correct and were available in a timely manner.

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the natural gas usage for the engine on a continuous basis. This device is installed and appears to be operating correctly.

3. This facility is required to record maintenance activities pursuant to the MAP. This appears to have been completed in a timely and correct manner.

4. The facility is required to keep records of when the engine is run without the add on control device. The compressor engine on site is not controlled therefore this condition does not apply

5. The permittee shall keep, in a satisfactory manner, monthly fuel use for the engine. These records are being kept and were made available in a timely manner.

6. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NOx emission calculation records for the engine. These records are being kept and were made available in a timely manner.

#### VII. REPORTING

1. The facility is required to notify the agency of any engine change out. No notifications have been received and the engine appears to have not been changed.

#### VIII. STACK/VENT RESTRICTIONS

1. Stack parameters at the facility do not appear to have been modified and appear correct.

#### IX. OTHER REQUIREMENTS -NA

#### FGFACILITY

##### I. EMISSION LIMITS

1. NOx emissions from this facility are limited to 89.9 tons per year based on a 12-month rolling time period determined at the end of each calendar month. For the period of October 2014 to October 2015, facility wide NOx emissions were 33.71 tons per year based on a 12-month rolling time period determined at the end of each calendar month.

##### II. MATERIAL LIMITS

1. The facility is required to burn only sweet natural gas at this facility. The annual gas analysis indicates non detectable H2S concentrations.

##### III. PROCESS/OPERATIONAL RESTRICTIONS -NA

##### IV. DESIGN/EQUIPMENT PARAMETERS -NA

##### V. TESTING/SAMPLING

1. Verification of H<sub>2</sub>S and/or sulfur content of the natural gas burned in at the facility may be required upon request. The annual gas analysis indicates non detectable H<sub>2</sub>S concentrations, therefore, requesting verification is not recommended.

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. All required calculations are required to be completed in a timely manner. Records of these calculations appear to have been performed in a timely manner and appear correct.

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NO<sub>x</sub> emission calculation records for the facility. These records are being kept and were made available in a timely manner.

**VII. REPORTING -NA**

**VIII. STACK/VENT RESTRICTIONS -NA**

**IX. OTHER REQUIREMENTS -NA**

This facility is in compliance with their opt out permitting.

NAME 

DATE 12/22/15

SUPERVISOR 