

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B555257048

<b>FACILITY:</b> Lambda Energy Resources LLC - CLEON 11		<b>SRN / ID:</b> B5552
<b>LOCATION:</b> Viaduct Rd., COPEMISH		<b>DISTRICT:</b> Cadillac
<b>CITY:</b> COPEMISH		<b>COUNTY:</b> MANISTEE
<b>CONTACT:</b> Vicki Kniss , Environmental Affairs Manager		<b>ACTIVITY DATE:</b> 02/25/2021
<b>STAFF:</b> Kurt Childs	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> 2021 FCE.		
<b>RESOLVED COMPLAINTS:</b>		

## Full Compliance Evaluation

I conducted a Full Compliance Evaluation (FCE) including site inspection and records review of the Merit Energy Company (MEC) Cleon 11 CPF. Records for this facility were requested along with other MEC facilities at the beginning of the year. The site inspection was conducted on 2/24/2021. The weather was mostly overcast, 31 degrees light west winds. No visible emissions were observed from any of the equipment at the facility and no significant odors. This facility is located in an isolated area down an access road west of Viaduct Rd. and North of Faylor Rd.

This facility has an opt-out Permit to Install number 26-05B which imposes certain requirements on the glycol dehydration system and a natural gas fired compressor engine. The compressor engine has previously been decommissioned and replaced with an electric motor operating a smaller compressor in a separate building. As a result, the requirements of PTI 26-05B regarding the EUCL11COMP1 are not currently relevant. At the time of the inspection the building housing the engine was buried in snow and had not been recently accessed. The compressor engine remains on-site and MEC has not voided the PTI.

In addition to the dehydration system and compressor, other equipment I observed at the site includes four tanks with VRU, five heaters (one operating), a flare, and other standard CPF equipment. Gas is extracted from the Niagaran formation and can contain H<sub>2</sub>S. An H<sub>2</sub>S scavenger system replaced the previously permitted sour gas sweetening plant in 2009. There are no emission points from the scavenger system and H<sub>2</sub>S concentration in the scrubbed gas going to the dehy was tested as non-detect (see wet gas analysis). Effluent from the scrubber is disposed of in a permitted injection well.

The dehy was operating at the time of the inspection. There were no odors or visible emissions, the dehy did not appear to be vented to the atmosphere and the PTI requires that a control device be installed and operating. In this case there is a condenser followed by the facility flare that serves as the control. The flare was burning at the time of the inspection. There was a small flame with no visible emissions.

Based on observations during the inspection and the records that were submitted, the requirements of PTI 26-05B appear to met as follows:

### PTI 26-05B, EUCL11DEHY

#### I. Emission Limits.

NA, there are no emission limits.

#### II. Material Use Limits.

**NA, there are no material use.**

### III. Process Operational Restrictions.

1. Compliance with 40 CFR Subpart HH; The dehy meets the exemption criteria for glycol dehydrators based on an annual average flow rate of less than 85,000 cubic meters per day.

### IV. Design/Equipment Parameters.

1. Flash tank installed and operated satisfactorily including routing emissions to the compressor engine; the compressor engine is no longer in use, emissions are still routed to the suction side of the compressor.
2. Control device, must be used for dehy emissions; There is a condenser and Dehy emissions are vented to the flare. The flare was operational at the time of the inspection.

### V. Testing/Sampling.

1. Annual wet gas analysis; Annual analysis is conducted and copy of the most recent results (at the time of the request) was provided (attached). H<sub>2</sub>S concentration was non-detect.

### VI. Monitoring/Recordkeeping

1. Determine the annual average natural gas flowrate as specified; Records are maintained and were provided (attached).
2. Maintain records of wet gas composition; See V.1 above
3. Maintain records demonstrating compliance with the Subpart HH annual average natural gas flowrate exemption; See VI.1 above.
4. NA, using flowrate not benzene emission rate to demonstrate Subpart HH exemption.

### VII. Reporting

1. Submit applicable notifications and reports required by Subpart HH; Initial notification only required for this area source.

### VIII. Stack/Vent Restrictions

**NA, no restrictions.**

### IX. Other Requirements.

1. Complete required calculations on a monthly basis; NA no monthly calculations required.

## FGFACILITY

**All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.**

### I. Emissions

**1. NO<sub>x</sub> Emission limit: 89.9 tons per 12-month rolling time period. Facility records indicate NO<sub>x</sub> emissions are less than one ton.**

### II. Material Limits

**NA**

**III.Process/Operational**

- 1. The facility does not burn sour gas, as verified by testing.**
- 2. Compliance with Subpart HH is addressed in EUCL11DEHY.**
- 3. The H2S scavenger system is operated per manufacturers recommendations.**

**IV. Design/Equipment**

- 1. Emergency relief valves, storage tanks and dehydrators are vented to the flare.**

**V. Testing**

- 1. Verification of H2S content has not been requested by AQD but is provided in the annual wet gas analysis required in EUCL11DEHY SC.V.1. H2S concentration was non-detectable.**

**VI. Monitoring/Recordkeeping**

- 1. NOx emission calculation records are maintained and were provided (attached) and indicate compliance with the 89.9 tons per 12-month rolling time period limit. The 12-month rolling time period NOx emissions are less than one ton. Emissions are from the heaters only.**

**VII. Reporting**

**NA**

**VIII. Stack**

**NA**

**IX. Other**

- 1. Emission calculations are available as required.**

**At this time it appears that the Cleon 11 facility is in compliance with the requirements of PTI 26-08B and the Air Pollution Control Rules.**

NAME \_\_\_\_\_

DATE \_\_\_\_\_

SUPERVISOR \_\_\_\_\_