

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

N530942856

FACILITY: DCP Michigan Holdings, LLC - Warner 36		SRN / ID: N5309
LOCATION: 336 FRANKOWIAK RD, ELMIRA		DISTRICT: Cadillac
CITY: ELMIRA		COUNTY: ANTRIM
CONTACT: Dave Bennett , Manager Area Operations		ACTIVITY DATE: 12/05/2017
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Tuesday, December 5, 2017, Caryn Owens of the DEQ-AQD conducted a scheduled field inspection and records review of the DCP Midstream – Warner 36 facility (N5309) located at Frankowiak Road (SE1/4 , SE1/4, Section 36, T31N, R5W) in Warner Township, Antrim County, Michigan. More specifically the site is located west of the Frankowiak Road and Alba Road (M-42). The drive into the facility is approximately 0.65 miles from Alba and Frankowiak Road intersection. The purpose of this inspection was to determine the facility’s compliance with permit to install (PTI) 271-94A. DCP Midstream is considered a minor source due to the facility’s potential to emit is less than 100 tons per year in nitrogen oxides and carbon monoxide emissions. DEQ was accompanied by Dan Rolinski of DCP Midstream during the field inspection. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) from Oil and Natural Gas Production facilities (40 CFR, Part 63, Subpart HH), and NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ). The State of Michigan does not have delegated authority of the area source NESHAPS, and thus these areas were not reviewed by the DEQ at this time.

#### **Evaluation Summary**

Based on the activities covered during this field inspection, the facility appears to be in compliance with PTI 271-94A. Review of the records for the facility indicates the facility was in compliance with emission limits in accordance with the current PTI. No further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

#### **On-site Inspection:**

During the field inspection, the weather conditions were cloudy and snowing, with gusting winds from the southwest about 15 miles per hour, and approximately 35 degrees Fahrenheit. The facility was covered with snow and consisted of: three buildings. The building on the northeast corner of the Property contained the inlet and outlet pipelines and flow meters of the natural gas entering and exiting the site. A slug catcher is located on the east side of this building, and a blowdown tank on the northeast side of this building. A compressor building was located on the northwest side that supplied all the energy to operate the facility. The compressor engine was a Caterpillar G3512LE compressor engine operating at 1193 revolutions per minute (RPM), 61 pounds per square inch (psi) of pressure, 190 degrees Fahrenheit, and with no control. A small cooling tower for the compressor engine was located on the west side of this building. An amine plant that removes carbon dioxide (CO<sub>2</sub>). This facility uses direct fire for the amine process, the amine tower on the north side of the amine plant is the rich end (meaning high CO<sub>2</sub> content) at low pressure and treats the chemical and the southern amine tower is the lean tower and at high pressure that treats the CO<sub>2</sub> in the gas stream. A reflux condenser was located on the west side of the of the amine building, and an amine cooler, CO<sub>2</sub> stack (reflux accumulator). The CO<sub>2</sub> comes into the facility at approximately 10 percent and leaves the facility at 2 percent. The remainder is vented through the CO<sub>2</sub> stack east of the building. A glycol dehydrator, which is used to re-dry the natural gas after the amine process is located in the southern portion of the amine building.

The facility is claiming the following exemptions at the facility:

- glycol dehydrator meets exemption Rule 336.1288(2)(b)(ii)
- A 810 horsepower Caterpillar G3512LE, natural gas fired reciprocating internal combustion engine meets exemption Rule 336.1285(2)(g)
- Amine reboiler heater and glycol reboiler heater meet exemption Rule 336.1282(2)(b)(i).

#### **PTI Compliance Evaluation:**

**EUDEHY:** A Glycol dehydration system processing gas from the Antrim zone.

- EUDEHY underlying applicable requirements are based off 40 CFR Part 63 Subpart HH requirements. The site is an area source and the State of Michigan has not been given delegated authority of 40 CFR Part 63 Subpart HH for area sources. Therefore, a compliance analysis of EUDEHY was not conducted for this time.

**EUAMINEUNIT:** Contacting tower using an amine liquid to remove carbon dioxide from natural gas.

- **Emission Limits:**  
The Emission Limit is 71,160 tons of carbon dioxide (CO<sub>2</sub>) per year based on a 12-month rolling time period. Based on records reviewed from November 1, 2016 through October 31, 2017, the highest emissions reported were 42, 200 tons of CO<sub>2</sub> based on a 12-month rolling time period, and reported within the permitted limits.
- **Materials/Fuels:**  
There are Material/Fuel limits for EUAMINEUNIT.
- **Process/Operational Parameters:**  
There are Process/Operational Parameters for EUAMINEUNIT.
- **Design/Equipment Parameters:**  
There are Design/Equipment Parameters for EUAMINEUNIT.
- **Testing/Sampling:**  
There are Testing/Sampling requirements for EUAMINEUNIT.
- **Monitoring/Recordkeeping:**  
The facility monitors and records the following information at the facility: the natural gas volumetric flow rate entering EUAMINEUNIT; carbon dioxide content of the natural gas entering EUAMINEUNIT; natural gas volumetric flow rate exiting EUAMINEUNIT; and carbon dioxide content of the natural gas exiting EUAMINEUNIT.  
  
Additionally, the facility completes all calculations of CO<sub>2</sub> emission rates in monthly and 12-month rolling time periods in formats acceptable by the DEQ, and the records are properly maintained.
- **Reporting:**  
There are Reporting requirements for EUAMINEUNIT.
- **Stack/Vent Restrictions:**  
Stack parameters for EUAMINEUNIT Reflux Accumulator stack have not changed since the previous inspection and appear to be within the permitted limits 12 inches in diameter and at least 75 feet above ground surface for the.
- **Other Requirements:**  
There are no Other Requirements for EUAMINEUNIT.

NAME Camp Owens

DATE 12/5/17

SUPERVISOR SN