

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

N569449168

FACILITY: CEDARLINE LLC - CHESTONIA 17		SRN / ID: N5694
LOCATION: 2467 Cedar River Road, CHESTONIA TWP		DISTRICT: Cadillac
CITY: CHESTONIA TWP		COUNTY: ANTRIM
CONTACT:		ACTIVITY DATE: 04/25/2019
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection & Records Review		
RESOLVED COMPLAINTS:		

On Thursday, April 25, 2019, Caryn Owens of the DEQ-AQD conducted a scheduled field inspection of the Riverside Energy Company (formerly Cedar Line LLC) – Chestonia 17 CO2 Plant (SRN: N5694) located at 2467 Cedar River Road in Mancelona Township, Antrim County, Michigan. More specifically, the site is located on the east side of Cedar River Road, approximately ¼ mile north of West Eddy School Road in Mancelona, Michigan. It is recommended to meet a company representative on site since typically the entrance to the facility is gated and locked. The field inspection and records review were to determine compliance with permit to install (PTI) 365-95B. This facility is currently considered a minor source.

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). The State of Michigan does not have delegated authority of the area source NESHAP, and thus the federal requirements were not reviewed by the MDEQ at this time.

Evaluation Summary

The activities covered during this field inspection and records review appear to be in compliance with PTI 365-95B. Review of the records for the facility indicates the facility was in compliance with emission limits in accordance to the PTI. No further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

Source Description:

DEQ was unaccompanied during the field inspection. The weather conditions were cloudy, with calm winds from the west and 68 degrees Fahrenheit. There were three main buildings on the site, with a few outbuildings for storage and sales. The southern and eastern buildings contain the CO2 plant equipment. AQD observed two amine reboiler stacks, and two glycol dehydrators. The eastern amine reboiler stack was approximately 30 feet above ground surface (ags), and the southern amine reboiler stack was approximately 38 feet ags. AQD observed two glycol dehydrators at the site; the northern-most glycol dehydrator stack was approximately 14 feet ags, and the reboiler stack was approximately 25 feet ags. The southern glycol dehydrator stack was approximately 12 feet ags, and the reboiler stack was approximately 18 feet ags. AQD observed a white steam plume coming from the northern-most glycol dehydrator, but the plume quickly dissipated. The site is permitted for two CO2 stacks, but only one stack is located onsite. The CO2 stack is located outside, just north of the buildings, and is approximately 75 feet ags. According to Ms. Natalie Schrader, the Compliance Coordinator of Riverside Energy Group, the smaller Amine system has not operated since at least 2016. AQD observed condensers on the north side of the eastern-most building, and a blow down tank on the northern portion of the buildings. There are three inlets that flow into Chestonia 17 to remove CO2 from the gas streams, which are Chessplay, Radec and Alba inlets. It should be noted that only a portion (approximately 40 percent) of the Radec inlet is bypassed from CO2 removal.

The facility is claiming the following exemptions at the facility:

- The blow down tank meets exemption Rules 336.1285(2)(mm).
- glycol dehydrator meets exemption Rule 336.1288(2)(b)(ii),
- the process heaters meet exemption Rule 336.1282(2)(b)(i).

Records Reviewed

FGAMINE: Two Amine units combined with 21.9 MMscfs processing capability, used to remove CO2 from the natural gas stream.

- There are no Process/Operational Parameters, Testing/Sampling Requirements, Reporting Requirements, and Other Requirements associated with FGAMINE.

- **Emission Limits:** Based on the records reviewed for the months of May 2018, July 2018, October 2018, January 2019, and March 2019, the highest CO2 emissions reported were 115,429 pounds of CO2 per day, which is less than the permitted 215,933 pounds of CO2 per day, which were within the permitted emission limits.
- **Materials/Fuels:** According to Riverside Energy, the highest amount of CO2 treated was 11,537,000 cubic feet per day, which is less than the permitted 21,900,000 cubic feet per day.
- **Design/Equipment Parameters:** The plant contains devices to monitor and record the volumetric flow rate and CO2 content of the natural gas entering FGAMINE on a daily basis.
- **Monitoring/Recordkeeping:** The facility monitors and records the flow rate and carbon dioxide content of the natural gas entering FGAMINE. The facility keeps continuous records of the flow rate and records the CO2 content on a daily basis. Calculations of the CO2 emission rate is recorded each day.
- **Stack/Vent Restrictions:** Based on visible observations during the field inspection, the stack of FGAMINE appeared to be at least 75 feet ags and about 8-inches in diameter.

NAME

Gary Owens

DATE

4/25/19

SUPERVISOR

SOJ