

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

N733053861

FACILITY: NorthStar Energy LLC - Hudson 34		SRN / ID: N7330
LOCATION: 04950 Camp Ten Rd, BOYNE FALLS		DISTRICT: Cadillac
CITY: BOYNE FALLS		COUNTY: CHARLEVOIX
CONTACT:		ACTIVITY DATE: 05/06/2020
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SMOPT OUT
SUBJECT: 2020 FCE.		
RESOLVED COMPLAINTS:		

FCE compliance inspection and records review.

The Hudson 34 site is a natural gas conditioning (dehydration) and compression facility. A CO2 removal process had previously operated at this source but it has been decommissioned and was removed from the source permit to install in February 2019 with the issuance of PTI 35-04E. Additional changes that were incorporated into that PTI were, the removal of EUENGINE3, the removal of one of the two glycol dehydrator burners, and the replacement of the Caterpillar G3516LE compressor in EUENGINE1 with a Caterpillar G3408TA engine. I inspected the site on 5/06/2020, and observed the following equipment:

- 1 CO2 removal plant with two heaters, appeared to be inoperable.
- 1 blow down tank
- 2 compressor engines (EUENGINE1, EUENGINE2)
- 2 glycol dehydrators (Warner, Great Lakes), one missing the burner.
- 2 iron sponge vessels

There are no gas liquids separation equipment, in-line heaters, or flare.

At the time of the inspection, none of the equipment was operating. the CO2 plant was appeared to be in disrepair, the burner was missing from one and the other was not operating, there were no vapors or odors from the shared vents. Two compressor engines remained on site but neither were operating. Compressor engine EUENGINE3 had previously been documented as removed.

The application for PTI 35-04E identified the compressor engines on-site as one Caterpillar G3408TA that was replacing the Caterpillar 3516 LE engine (EUENGINE1), one CAT 3408 TALE engine (EUENGINE2), Unit ID's on the compressor engine control panels identifies EUENGINE2 as NGCS 807 (north building), EUENGINE1 is now identified as NGCS3 (south building). Neither engine is equipped with external emission control devices, though the exhaust for EUENGINE2 did contain a housing for a catalytic converter. These match the current Permit to Install. As mentioned above, neither of the engines was operating and the control panel for EUENGINE had a sign warning not to start the engine as it had been drained of fluids for storage as of 3/05/2020.

A MAERS report had been submitted for this source and indicated it did run throughout 2019. The MAERS report included emission calculation records for 2019. Additional records regarding maintenance were requested on 5/07/2020 when I was informed by Mr. Adam Kaczanowski of NorthStar that the Hudson 34 CPF had been sold but the new owner had not formed or named a company yet. Mr. Kaczanowski was able to obtain maintenance records for EUENGINE1 from the compressor lease company but has not been able to obtain records for the other engine.

The emissions calculations (attached) include records of fuel usage as required by the

PTI and indicate NOx emissions from each engine in 2019 were 1.298 tons for EUENGINE2 and 21.17 tons for EUENGINE1. The total NOx emissions are in compliance with the 46.54 ton per year limit in PTI 35-04E. Note that the attached emission calculations from ECT appear to have the Engine Input Parameter columns mislabeled, the column for EUENGINE1 is labeled EUENGINE2 and vice versa. The calculations appear to be in the correct columns though based on the engine emission factors.

As indicated above, only one of the two dehydration systems at the facility remains operable but it was not operating at the time of the inspection. The glycol dehydrator is equipped with a condenser.


This source does process sour gas and Iron sponges were in place and are used to remove H2S from the gas when operating. Fuel gas analysis was requested to determine that the engines are not burning sour gas as required by the permit. Test data was not available but Mr. Kaczanowski stated the gas has been tested with Draeger tubes and indicates no H2S.

The blow down tank sits in a lined containment structure. At the time of the inspection the containment area was about $\frac{3}{4}$ full.

A revised PM/MAP plan had been previously submitted to update the compressor engine information. It was approved on 4/22/19.

The 2019 MAERS report was submitted and subsequently reviewed on 5/04/2020.

Under the ownership circumstances at this time, it appears that the facility is in compliance with PTI 35-04E and the Air Pollution Control Rules pending a return to operation. Change of ownership issues will need to be addressed as well as recordkeeping once the new owner is identified.

NAME  DATE SUPERVISOR 