

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

N613623480

FACILITY: LINN Operating, Inc. - Fred 10 CPF		SRN / ID: N6136
LOCATION: W2 NE4 T28N R4W SEC 10, FREDERIC		DISTRICT: Cadillac
CITY: FREDERIC		COUNTY: CRAWFORD
CONTACT: Diane Lundin , Senior EHS Representative		ACTIVITY DATE: 10/23/2013
STAFF: Kurt Childs	COMPLIANCE STATUS: Pending	SOURCE CLASS: SM OPT OUT
SUBJECT: 2014 FCE.		
RESOLVED COMPLAINTS:		

#### Full Compliance Evaluation

I conducted a full compliance evaluation including site inspection and records review of the Linn Energy Fred 10 CPF located off Twin Peaks Rd. in Frederic Township, Otsego County. The Fred 10 is an opt-out facility with PTI 694-96. This facility including one Caterpillar G399TA compressor engine, was originally permitted in 1996 by Mercury Exploration Company and was subsequently transferred to Quicksilver Resources. A 5/25/05 change of ownership letter from Quicksilver states that they received operational responsibility for the facility effective 1/1/98. At that time file documents indicate there were two compressor engines on site; one Ajax DPC 360 and one Caterpillar 3512. File records indicate a Cat 3306TA booster engine was added in February 2006 per R 285(g) exemption. On 11/13/07 the AQD was notified that BreitBurn had taken over operating responsibility for numerous Quicksilver facilities including the Fred 10. An inspection on 8/26/08 indicated there was only one Caterpillar compressor engine, no catalyst. On June 24, 2013 AQD received a letter from Linn Energy had acquired ownership of several facilities including the Fred 10. This notification indicated there was one 1018 HP Caterpillar 3516 compressor engine. It appears that compressor engines have been changed out over the years with no changes to the original PTI 694-96.

#### Emission limits in the PTI are as follows:

- CO = 89 TPY
- VOC = 89 TPY
- NOx = 89 TPY
- HAP = 9 TPY (individual), 22.5 TPY (combined)

Past records and MAERS reports do not indicate that these limits have ever been exceeded.

Equipment at the facility as originally permitted included the Caterpillar G399TA compressor engine with catalytic converter and a dehydrator. Also identified in the PTI application were two inline heaters, three heater treaters, an amine reboiler, a flare and unspecified number of tanks.

At the time of the inspection the facility consisted of the following equipment:

- A building housing one compressor/engine and a glycol dehydrator. As indicated above, the change of ownership documentation from Linn Energy indicates the compressor on site is a Cat 3516 (Unit 4226) which differs from the engine originally permitted. At the time of the inspection the building was closed up and none of the safety lights appeared to be operating. Most importantly, the green light was not lit. File documentation indicates the facility now only processes Antrim gas but without an H2S monitor I opted not to enter the building. I could observe through the door window that there was one engine and that it was not equipped with a catalytic converter. I could also observe the glycol dehydrator. From the outside of the building I observed that the engine was running and there was no visible emissions from the exhaust stack. The dehy also vented outside the building and I could observe and smell mild vapors from the vent.
- There was a containment area in which 5 tanks were present. The tanks appeared to be plumbed for vapor recovery but the only intact pipes from the tank roofs lead to the load-out area. I did not see a vapor recovery unit. The piping was in poor condition with insulation exposed and falling off the pipes. Piles of insulation were on the ground and disintegrating. The insulation was the type that appeared that it could contain asbestos. The piping did not appear to be in regular use. The same was true for most of the facility except for the compressor/dehy building.
- There was a tall flare at the end of a long section of pipe racks but it did not appear to be operating. There was no flame and no visible emissions.
- I did not observe any inline heaters or heater treaters.
- I did not observe any gas sweetening equipment.

At the time of the inspection Northern Michigan Well Drillers were on site working in a separate area.

Following the inspection I contacted Ms. Diane Lundin of Linn Energy and requested the following records:

- Monthly fuel consumption.
- Monthly crude/condensate throughput to the tanks.
- Monthly hydrocarbon liquid trucked.
- Glycol circulated through the dehydrator.
- Log of significant maintenance activities.

- CO, VOC, NOx, and HAP emission records.
- Facility asbestos evaluation.
- PTI application or exemption demonstration for current compressor engine.

PTI 694-96 does not require a Malfunction abatement plan for this facility. In a letter to EPA Region V dated 10/18/13 Linn Energy submitted a Re-Notification of applicability for Subpart ZZZZ as an area source of HAPs. On 10/31/13 the company provided the following records:

The engine is a CAT 3516LE and is not equipped with a catalyst.  
Monthly fuel consumption (for compressor engine and dehy)  
Monthly crude/condensate throughput (on dehy sheet). No throughput.  
Monthly Hydrocarbon Liquid trucked (on dehy sheet). No liquids trucked.  
Glycol circulation rate (on dehy sheet) 0.20gpm.  
Maintenance logs.  
Emission records. All emissions below the PTI limits identified above.

Additionally, the cover letter submitted with the records indicates that the building warning lights have been repaired and that Linn Energy is looking into the asbestos issue. I have also notified Sharon LeBlanc of the AQD Saginaw Bay District Office regarding the asbestos issue.

Review of the records indicates that the records were complete and up to date and that the reported 12-month rolling time period emissions of 19.02 tons NOx, 17.12 tons CO and 4.56 tons VOC were in compliance with the permit limits.

The results of the inspection and records review indicate the facility is currently in compliance with the emission limits in PTI 694-96. However the engine currently on site is not the engine that was originally permitted. Information in the company's records submittal indicates that the current engine could be exempt from Rule 201 requirements per R 285(g) because it has both a heat input rating less than 10MMBtu and potential to emit less than 100 tons CO and 40 tons NOx, SO2 and VOC. Linn Energy has requested in the cover letter that PTI 694-96 be voided. However, the tanks, not apparently in use, and the glycol dehydrator are also covered by the PTI. The glycol dehydrator does not meet the exemption requirements of Rule 288 because it processes Niagaran as well as Antrim formation gas. The tanks are less than 400 bbl in size and are not used for oil. As a result the permit could be requested to be modified but not voided.

NAME



DATE

11-5-13

SUPERVISOR

