

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

N830232624

FACILITY: LINN Operating Inc. - 45th Parallel CPF		SRN / ID: N8302
LOCATION: SW NW NE SEC 13, T30N, R9W, TORCH LAKE		DISTRICT: Cadillac
CITY: TORCH LAKE		COUNTY: ANTRIM
CONTACT:		ACTIVITY DATE: 12/10/2015
STAFF: Kurt Childs	COMPLIANCE STATUS:	SOURCE CLASS: SM OPT OUT
SUBJECT: 2016 FCE.		
RESOLVED COMPLAINTS:		

I conducted a Full Compliance Evaluation, including site inspection and records review, of the Linn Operating 45th Parallel CPF to determine compliance with the conditions of PTI 167-09 and the Air Pollution control Rules. At the time of the inspection the temperature was in the mid 40's, winds were from the southeast. There were no visible emissions from the compressor engine stack and only light vapors from the dehy. Mild odors were detectable near the dehy vent. A Linn Operating operator was present when I arrived and I introduced myself and the purpose of my inspection.

There are two tanks and VRU within a containment area at the site, the containment was dry. One small dehy was present outside the compressor building. It did not appear to be equipped with a condenser or flash tank, control of the dehy is not required by the PTI. There were no heaters or flares at the site.

One compressor/engine was present, identified on the skid as GCS827, a Caterpillar 399TA SN 35B4034. The engine was operating at 790 rpm with oil pressure of 55 psi and coolant temperature of 175 degrees F. These readings were consistent with readings present on the engine log sheets on-site. Stack parameters for the engine are 12" maximum diameter and 39' minimum height. The stack appears to meet these requirements.

The engine is equipped with a catalytic converter and the inlet and outlet temperatures were 885 degrees F and 890 degrees F respectively. The air fuel ratio controller readings were as follows:

Engine Bank	Output	Stepper motor setting
Left	0.750v	1284
Right	0.752v	1305

There was also an iron sponge vessel for H₂S removal located outside the compressor building.

Following the inspection I requested emission calculations, maintenance records and fuel gas H₂S content records from Linn Operating. I received the records on January 4, 2016 which indicated that 12-month rolling time period emissions of NO_x and CO ranged from 2.46 to 2.72 tons NO_x and 5.11 to 5.66 tons CO. 12-month rolling NO_x and CO Permit limits are 10.7 and 22.3 tons per year respectively. The records indicate that the source has been in compliance with NO_x and CO emission limits. Additionally, monthly operating reports and maintenance records were provided that demonstrate the equipment is being inspected and maintained as required. The H₂S records indicate H₂ contents of 26 grains H₂S at the iron sponge inlet and 0 grains H₂S at the outlet. Gas from the iron sponge outlet is compressed, dehydrated and used as fuel on-site.

This source has an MAP that was last reviewed and approved on 6/23/2014. The 2014 MAERS reporting was previously reviewed and reported source emissions of NO_x and CO as 2.72 and 5.65 tons.

This source is an Area Source under 40 CFR 63 Subpart ZZZZ. The source has been demonstrated to meet the throughput exemption requirements of 40 CFR 63 Subpart HH for dehydrators.

As a result of the Full Compliance Evaluation it appears the source is in compliance with PTI 167-09 and the Air Pollution Control Rules at this time.

MACES- Activity Report

NAME 

DATE 1-4-15

SUPERVISOR 