

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

B913533536

FACILITY: MERIT ENERGY CO. - BEAR LAKE 13		SRN / ID: B9135
LOCATION: 0000 11 MILE RD, BEAR LAKE		DISTRICT: Cadillac
CITY: BEAR LAKE		COUNTY: MANISTEE
CONTACT: Vicki Kniss,		ACTIVITY DATE: 03/02/2016
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2016 FCE; site inspection, records review.		
RESOLVED COMPLAINTS:		

I conducted a Full Compliance Evaluation (FCE) of the MEC Bear Lake 13 CPF including an on-site inspection and records review. The facility is permitted under Permit to Install No. 48-04A. At the time of the inspection the weather was partly cloudy, 23 degrees and light SW winds. No MEC personnel or contractors were on site at the time of the inspection.

The Bear Lake 13 facility is remotely located about a half mile south of 11 mile rd. on an access road. The facility consists of the usual CPF equipment spread out over a fairly large area. There were seven tanks (4 with a VRU), a blow-down tank, four heaters (three appeared to be operating), Separator building, one glycol dehydrator, and a building housing one compressor engine. There was no flare. During my initial observations of the facility I did not observe any visible emissions or detect any significant odors.

Compliance Evaluation

1. EU-BL13DEHY – Glycol dehydration system processing gas from the Niagaran formation.

1.1 And 1.2. Merit is not allowed to operate the facility unless a flash tank and condenser are installed and operating in a satisfactory manner. At the time of the inspection, the flash tank and condenser were installed. There were no visible emissions from the vent stack and no odors.

2. FG-BL13COMPS – Two natural gas fired compressor engines are permitted under PTI 48-04A but one has previously been removed and the AQD notified by the company, the MAP was updated to reflect this change. The remaining engine is a 1,000 hp Waukesha L7042GSI with catalytic converter and Air/fuel ratio controller. The engine was operating at the time of the inspection at 806 RPM. The Catalyst inlet temperature was 1,031 degrees and the outlet temperature was 1,013 degrees. The MAP specifies that inlet temperature should be between 750 and 1,200 degrees F and the outlet temperature should not be more than 12 degrees less than the inlet temperature (outlet temperatures lower than the inlet temperature have been observed during emissions testing). Therefore, it appears there could be an issue with the catalyst. MEC has been notified and a response requested.

2.1 This facility has an approved MAP which was most recently updated on 9/02/15.

2.2 The compressor engine is not allowed to operate for more than 200 hours per year without the catalyst. Review of records requested for this FCE indicates the engine did not operate without the catalyst during the period of review.

2.3 PTI 48-04A requires that FG-BL13COMPS not operate unless the 3-way catalyst is installed, maintained, and operated in a satisfactory manner. The catalyst is installed and has been operated during engine operation but observations during the inspection call in to question whether it is being operated satisfactorily.

2.4. NOx and CO emission testing may be required upon request by AQD. At this time AQD has not made such a request.

2.5. Monitoring of natural gas usage is required. The compressor engine was equipped with meter to monitor the natural gas usage. The natural gas usage is recorded monthly and was provided by MEC with the requested records.

2.6. Significant maintenance activities; MEC provided records of significant maintenance activities during the review period.

2.7. Records of operating hours without the catalyst; Records indicate the engine did not operate without the catalyst.

2.8. Monthly fuel use records; records are maintained and were provided for the period under review. This information is used in the monthly emissions calculations.

3. FGFACILITY – All process equipment at the facility including equipment covered by other permits, grandfathered equipment and exempt equipment.

3.1a. NOx emission limits:

89 tons per 12-month rolling time period; the attached records indicate the monthly and 12- month rolling time period NOx emissions were significantly lower. The 12-month rolling time period NOx emissions ranged from 5.23 tons to 5.94 tons.

3.1b. CO emission limits:

89 tons per 12-month rolling time period; the attached records indicate the monthly and 12-month rolling time period CO emissions were significantly lower. The 12-month rolling time period CO emissions ranged from 7.14 tons to 8.12 tons.

3.2. Past analysis indicates the natural gas burned as fuel at the facility is sweet.

3.3. Verification of H2S/Sulfur content was not requested during the review period.

3.4 And 3.5. Monthly emissions calculations; MEC maintains monthly emission records and provided the attached copies for the review period.

Other Equipment

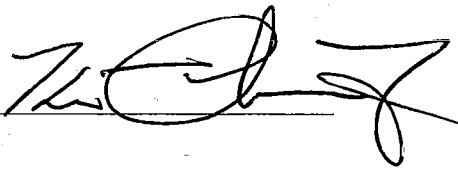
The tanks appear to meet the requirements for permit exemption under R 284(e). I observed 4 heaters, three of which were operating. The heaters appear to be PTI exempt per R 282(b).

Consent Order 5-2007

The consent order was in effect at the time of the previous FCE. It has now been terminated as of March 22, 2012.

Conclusion

Based upon the on-site inspection and records review, it appears that the facility is in compliance with applicable state and federal regulations as well as Permit to Install No. 48-04A.

NAME  DATE 3/3/2016 SUPERVISOR 