

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

B913728747

FACILITY: Merit Energy Company - Bear Lake 32		SRN / ID: B9137
LOCATION: Adamson Lake Rd., BEAR LAKE		DISTRICT: Cadillac
CITY: BEAR LAKE		COUNTY: MANISTEE
CONTACT: Vicki Kniss		ACTIVITY DATE: 03/05/2015
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2015 FCE inspection and records review.		
RESOLVED COMPLAINTS:		

**2015 FCE, B9137 Merit Energy Bear Lake 32**

I conducted a Full Compliance Evaluation of the MEC Bear Lake 32 CPF including an on-site inspection and records review. The facility is permitted under Permit to Install No. 51-04A. At the time of the inspection the weather was overcast, 10 degrees F, light West wind. An MEC employee stopped in during the inspection and I informed him who I was, showed him my ID and provided a business card, and stated the purpose of my inspection.

**COMPLIANCE EVALUATION****1. EUBL32DEHY**

- 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 of the drip tank and no odors or visible emissions were detectable.

**2. FG32COMPS**

- Two natural gas fired compressor engines used to boost the pressure of the natural gas prior to entering the sales line. At the time of the inspection, there were two Waukesha V-12 engine identified as units 206 and 146 on-site. Both engines were equipped with a catalyst. Unit 206 was operating at 916 rpm and Unit 146 was not operating at the time of the inspection. The operating log for Unit 146 indicates that it had last operated on 1/15/15.

2.1. A Malfunction Abatement and Preventative Maintenance Plan has been submitted to the AQD. This plan was approved on March 19, 2007 and most recently revised on 1/04/2010.

2.2. The permit requires that FG-BL13COMPS not operate unless each 3-way catalyst is installed, maintained, and operated in a satisfactory manner. At the time of the inspection the catalytic converters were installed on both engines. The engine for Unit 206 was operating with a catalyst inlet temperature of 976 degrees F and an outlet temperature of 1010 degrees F. The monthly operating log on-site also confirmed satisfactory operation.

2.3 and 2.4. Monitoring of natural gas usage is required. The compressor engine was equipped with a flow meter to monitor the natural gas usage. The natural gas usage is recorded monthly and was provided by Merit Energy. According to the records provided the 12-mos rolling avg. combined engine natural gas usage was 52.7 MMcf in January 2014 and decreased throughout the year to 33.3 MMcf in December 2014.

2.5. The permit requires a log of all significant maintenance activities. Merit Energy provided AQD staff with records of all maintenance activities performed at the CPF including testing of the catalyst for each engine.

**3.FGBL32TANKS**

3.1 the permit requires that FGBL32 TANKS not be operated unless the vapor recovery unit is installed and operating properly. At the time of the inspection a vapor recovery unit was connected to the 5 storage tanks and was operating.

**4. FGFACILITY**

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

4.1a. The nitrogen oxide (NOx) emissions from the facility are limited to 89 tons per 12-month rolling time period. Records submitted by the company (attached) indicate that the 12-month rolling time period NOx emissions were 8.69 tons in January 2014 and decreased to 5.77 tons by December 2014.

4.1b. The carbon monoxide (CO) emissions from the facility are limited to 89 tons per 12-month rolling time period. Records submitted by the company (attached) indicate that the monthly and 12-month rolling time period CO emissions were 11.44 tons in January 2014 and decreased to 7.64 tons by December 2014.

4.2. The facility is allowed to burn only sweet natural gas. Past gas analysis provided by Merit Energy have indicated that the gas burned in the facility is sweet.

4.3. MEC is limited to burning 100,000,000 standard cubic feet of natural gas in FGFACILITY per 12-month rolling time period. As indicated above, records provided by MEC indicate fuel usage ranged from 52.7MMcf to 33.3 MMcf per 12-month rolling time period.

4.4, 4.5, and 4.6. The permit requires that monthly NOx and CO emission calculations be completed and available in a format acceptable to the AQD. The records were complete and provided as requested by AQD.

4.7. The permit requires that MEC maintain records of the monthly and 12-month rolling time period natural gas usage. As indicated above the records are maintained and were provided upon request.

#### OTHER EQUIPMENT

There are several small heaters that are exempt per R 282(b) but fuel use in the heaters is accounted for in FGFACILITY.

#### CONSENT ORDER 5-2007

The Consent order was terminated on 3/22/2012.

#### CONCLUSION

Based upon the on-site inspection and records review, AQD staff believe that the facility is in compliance with applicable state and federal regulations as well as Permit to Install No. 51-04A.

NAME



DATE

3-6-15

SUPERVISOR

