

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

B558725778

FACILITY: Merit Energy Company. - Mayfield 23		SRN / ID: B5587
LOCATION: Center Rd., KINGSLEY		DISTRICT: Cadillac
CITY: KINGSLEY		COUNTY: GRAND TRAVERSE
CONTACT:		ACTIVITY DATE: 06/26/2014
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2014 FCE		
RESOLVED COMPLAINTS:		

2014 Full Compliance Evaluation, site inspection and records review.

I conducted an inspection of the Merit Energy Company (MEC) Mayfield 23 facility to determine compliance with PTI 193-08 and the Air Pollution Control Rules. The plant operator was present at the time of the inspection. The Mayfield 23 CPF is an opt-out source. The CPF services several wells and has a separator building with separators for each well. There is one in-line heater, a dehydrator, one stock tank, one operating compressor engine and two engines that are not operating. The facility also includes a sulfinol gas sweetening plant that includes a sulfinol reboiler and a flare for H2S control.

The facility is surrounded by a fence that is properly marked with H2S warning signs. Throughout the inspection there was a flame but no visible emissions from the flare. No odors were detectable off-site and I did not notice odors on-site either. The sweetening plant reboiler includes two 1.375 MMBTU heaters that were operating at the time of the inspection. There were no visible emissions from the heaters. This facility is an area source with regard to National Emission Standards for Hazardous Air Pollutant regulations for Reciprocating Internal Combustion Engines and for Industrial, Commercial and Institutional Boilers and Process Heaters.

As previously determined the dehydrator processes less than 85,000 cubic meters of natural gas and is therefore has no requirements from the Oil and Gas Production Facility MACT (subpart HH). The dehydrator is vented to the flare but does not have any additional control (condenser or flash tank) according to the plant operator. PTI 193-08, SC 2.2 states that the dehy shall not be operated unless the flash tank is installed, maintained and operated in a satisfactory manner. I did not observe any equipment clearly identified as a flash tank but contacted MEC following the inspection for confirmation. MEC confirmed that a flash tank is installed and provided additional information regarding its location.

Only the Caterpillar 3408TA V-8 compressor engine is still operating at the site. This engine is not equipped with a catalytic converter. At the time of the inspection it was operating at 890 rpm which was consistent with readings on the engine log form. The other two engines are a Waukesha V-12 and a Worthington 5LHC4 375hp and have not operated in recent years.

I had previously requested records from MEC which were provided on November 1, 2013 and are attached to this report. The records include maintenance activities and monthly emission calculation sheets that include emissions and fuel use data. These records indicate the NOx and CO emissions are well below the 82.5 tpy limit for NOx and 20 tpy limit for CO. The PTI also requires that quarterly reports of the 24-hour time period mass flow rate of hydrogen sulfide (used to demonstrate compliance with the SO2 emission limit) and the volumetric gas flow rate are submitted to AQD. Those reports have been reviewed as they are received and have not indicated any exceedences of the SO2 limit of 485 pounds per 24-hr period.

The MAERS report was reviewed on 5/29/14 and the quarterly reporting for the past year has also been reviewed as it is received (see MACES).

As a result of my site inspection records review and reporting review it appears the Mayfield 23 CPF is in compliance with PTI 193-08 and the Air Pollution Control Rules at this time.

NAME  DATE 7-9-14 SUPERVISOR 