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

N660937208		
FACILITY: MERIT ENERGY CO ALBERT 16 CPF		SRN / ID: N6609
LOCATION: 4850 Winding Road, Sec 16 Albert TWP, LEWISTON		DISTRICT: Cadillac
CITY: LEWISTON		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 10/19/2016
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2017 FCE. Inspection and records review.		
RESOLVED COMPLAINTS:		

Full Compliance Evaluation

Site Inspection

I conducted a scheduled (unannounced) inspection of this CPF to determine compliance with process, operational, and equipment requirements of PTI 213-07 on 10/19/2016. This CPF is an opt-out source. The PTI identifies one compressor engine. At the time of the inspection I observed one compressor engine as well as a dehy, five tanks, and 5 heaters.

The dehy is located outdoors and was operating. still emissions were controlled by a condenser. I did not detect any vapors or odors from the dehy. Vapors from the condenser appear to be routed to the reboiler burner. There was an operating vapor recovery system on a set of 4 standard CPF tanks (three oil, one process water). There was also a LPG style tank that was labeled "Condensate" that did not appear to be connected to the vapor recovery unit. The permit does not contain any requirements regarding this dehy and the tanks are small enough (<40,000 gallons) to meet the Rule 284 exemptions. None of the five heaters appeared to be operating. They are also small enough (< 50,000,000 BTU) to comply with the Rule 282 exemption.

One Compressor unit with a 12 cylinder Waukesha engine (L 7042 GSI) was located in it's own building. The engine was equipped with a catalytic oxidizer and was running at 670 RPM. Catalyst inlet temperature was 857 degrees F and outlet temperature was 881 degrees F. A daily inspection log was present and up to date. The operating parameters I observed confirmed those noted in the daily records. There were no visible emissions from the stack. The equipment at the facility appeared to be as described in the PTI and appeared to be operating normally.

Records Review

Records were previously requested and received on 10/24/16, they include;maintenance logs, gas analysis, monthly emission calculation spreadsheets with fuel usage, and engine operation hours without catalyst. Maintenance records indicate that the catalyst has been serviced and tested and O2 sensors have been replaced regularly. The gas analysis indicates the gas that is processed is sweet natural gas (11ppm H2S = 0.69 grains/100 ft³). Monthly and Rolling 12-month time period emission records demonstrate compliance with the NOx and CO emission limits in PTI 213-07. According to Merit Energy the engine did not operate without a catalytic converter (200 hours operation annually is allowed).

PTI 213-07 Requirements

Emission Limits

As indicated above, records indicate the engine and the facility as a whole, have met the PTI emission limits. The highest 12 month rolling emissions of NOx and CO were 7.39 tons and 10.10 tons respectively. 12 month rolling emission limits are 12.5 tpy and 17.4 tpy respectively.

Process/Operational Limits

A PM/MAP dated October 4, 2007 was previously approved by AQD.

As indicated above the engine did not exceed the allowed 200 hours per year of operation without a required catalyst.

Equipment

As detailed above, the inspection and records review indicate that the add-on control device (catalytic converter) is installed, maintained, and operated properly.

Testing

No testing has been requested by AQD.

Monitoring

At the time of the inspection the engine was equipped with a device to monitor and record natural gas usage.

Recordkeeping/Reporting

As indicated by the attached records, all of the required emissions, maintenance, control device operation, and fuel use records are being maintained and are available.

Stack/Vent

The compressor engine stack appeared to meet the specification in the PTI, there have been no changes.

As a result of this evaluation it appears that the MEC Alber 16 is in compliance with PTI 213-07 and the Air Pollution Control Rules.

DATE 10-25-16 SUPERVISOR