

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

B916028748

FACILITY: Merit Energy Company - Maple Grove 16		SRN / ID: B9160
LOCATION: Healy Lake Rd., KALEVA		DISTRICT: Cadillac
CITY: KALEVA		COUNTY: MANISTEE
CONTACT: Vicki Kniss, Environmental Affairs Manager		ACTIVITY DATE: 03/05/2015
STAFF: Kurt Childs	COMPLIANCE STATUS:	SOURCE CLASS: SM OPT OUT
SUBJECT: 2015 FCE, compliance inspection and records review.		
RESOLVED COMPLAINTS:		

B9160 Merit Energy Maple Grove 16**Full Compliance Evaluation****INTRODUCTION**

I conducted a Full Compliance Evaluation of the Merit Energy Company (MEC) Maple Grove 16 to determine compliance with opt-out permit number 47-04A and the Air Pollution Control Rules. The weather was overcast, 12 degrees with light west winds.

EU-MG16DEHY

1.1 There is a flash tank installed at the facility and it appears to be operating properly.

1.2 There is a condenser installed at the facility and it appears to be operating properly.

There were no noticeable visible emissions or odors from the dehy. Glycol circulation pump was operating at a rate of 12 strokes per minute.

EU-MG16COMP1

2.1 The facility has an active PM/MAP that was approved on March 9, 2007; the plan was most recently updated 1/20/2012 with current operating variables.

2.2, 2.3, 2.7 The facility has installed the three-way catalyst and the catalyst was replaced on 5/14/2014 according to facility records.

2.4 NOx testing has not been requested by the AQD District Supervisor in the last 12 months.

2.5 The amount of natural gas used by the compressor engine is being monitored and recorded as required.

2.6 Significant maintenance activities are being logged at the facility (see attached). The engine (unit 189, Waukesha L7042GSI) has not been changed out since the last inspection.

2.8 Monthly fuel use records for the compressor engine are being kept. Facility records indicate that 12-month rolling time period fuel usage is around 25 MMcf.

2.9 Stack parameters at the facility have not changed since the last inspection and appear correct.

The engine was operating at 645 rpm at the time of the inspection with catalyst inlet and outlet temps of 869 degrees F and 912 degrees F respectively. AFRC O2 readings were L=0.62% and R=0.73%. The engine is equipped with a positive crankcase ventilation system employing an external venturi that is mounted on top of the engine. The crankcase emissions from the venturi bypass the catalyst and are ducted to the engine exhaust stack. No visible emissions were present at the time of the inspection.

EU-MG16COMP2

Waukesha F2895G inline 6 cyl. engine. The engine is no longer operating and the compressor has been disassembled.

3.1 The facility has an active PM/MAP that was approved on March 9, 2007 and most recently updated on 1/20/2012 with current operating variables.

3.2 - NOx testing has not been requested by the AQD District Supervisor in the last 12 months.

3.3 No natural gas usage during the review period, engine not operating.

3.4 No significant maintenance during the review period, engine not operating.

3.5 No fuel use during the review period, engine not operating.

3.6 Stack parameters at the facility have not changed since the last inspection and appear correct.

FG-FACILITY

4.1A - NOx emissions for the entire facility are limited to 89 tons per year based on a 12-month rolling time period. Records as of September 2014 indicate that the facility is emitting 7.71 tons of NOx based on a 12-month rolling time period.

4.2 - Only sweet natural gas is burned at the facility. H2S is removed in an iron sponge treatment process.

4.3 - H2S and Sulfur content of the natural gas burned has not been required by the District Supervisor

4.4, 4.5 - All required records are being kept by the facility and were provided upon request in a timely manner.

At the time of the inspection there were 5 storage tanks with a VRU which was operating, three of the tanks were marked "Crude Oil". There were also 6 heaters on-site.

Mr. Ben Lautner of MEC was on-site at the time of the inspection. After moving my vehicle I exited the car and my H2S monitor went off displaying a maximum reading of 25 ppm. I did not notice any odors. I immediately moved the vehicle and the concentration on the meter decreased to 0. I informed Mr. Lautner who had several H2S detectors and we checked the area where my monitor had gone off. No H2S was detected on either his monitors or mine and no odors were detected. It is possible that the detector picked up the automobile exhaust when I exited the vehicle.

As a result of the inspection and the records review it appears the Maple Grove 16 facility is in compliance at this time.

NAME



DATE

3-6-15

SUPERVISOR

