

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

N605028844

FACILITY: CHEVRON MICHIGAN, LLC - HAWK LAKE CPF		SRN / ID: N6050
LOCATION: NE NE T29N R5W SEC 21, MANCELONA		DISTRICT: Cadillac
CITY: MANCELONA		COUNTY: ANTRIM
CONTACT: Natalie Schrader, SR. Production assistant		ACTIVITY DATE: 03/13/2015
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection & Records Review		
RESOLVED COMPLAINTS:		

On Friday, March 13, 2015, Caryn Owens of the DEQ-AQD conducted a scheduled on-site inspection of the Chevron Michigan, LLC (Chevron) – Hawk Lake CPF (N6050) located in the northeast quarter of the northeast quarter of Section 21, Township 29 North, Range 5 West in Mancelona, Antrim County, Michigan. More specifically, the site is located on the south side of Mancelona Road (M-38), approximately 1 mile west of the North Crooked Lake Road and Mancelona Road intersection. There is an access gate surrounding majority of the Property which was locked at the time of the inspection. DEQ had a key to access the Property. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 601-96. The site is currently an area source for hazardous air pollutants, and has opted out of major source applicability by limiting the operational and/or production limits potential to emit (PTE) to be below major source thresholds. DEQ was unaccompanied during the field inspection, an inspection brochure was not given to anyone at this facility, but a brochure will be emailed to the company with this inspection report. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart HH, and NESHAP 40 CFR Part 63 Subpart ZZZZ. The State of Michigan does not have delegated authority of the area source NESHAPs, and thus these areas were not reviewed by the DEQ at this time.

The site was covered in snow, and the weather conditions were partly to mostly cloudy, with calm winds, and approximately 45°F. The equipment at the site consisted of one main building containing: a compressor engine; vertical separators; and a glycol dehydrator. The glycol dehydrator was in the northwest portion of the building, and was used to dry the field gas prior to transporting it to the sales line. DEQ observed a heat shimmer from the glycol dehydrator process heater, and a slight steam plume from the glycol dehydrator stack outside of the building. The glycol dehydrator process heater stack was approximately 18 feet above ground surface, and the glycol dehydrator stack was approximately 12 feet above ground surface.

The engine was a 500 horsepower (hp) Caterpillar 398 rich burn engine, identified on the logs at the facility as Unit 936. The engine was operating at 1198 RPM, 250°F, and 45-50 psi, and appeared to have a catalyst, but the catalyst was not operating at the time of the walkover. The inlet and outlet temperatures both read 91°F. According to records, the engine does not operate with a catalyst. The stack on the compressor engine contained a muffler and was approximately 15 feet above ground surface, no other visible emissions were observed from the compressor engine stack.

Records Reviewed

- **Emission Limits:** In reference to Special Conditions (SC): 13 and 14, the facility is limited to no more than 89 tons per 12-month time period of carbon monoxide (CO), nitrogen oxide (NOx), volatile organic compounds (VOCs), and no more than 9 tons per 12-month rolling time period for a single hazardous air pollutant (HAP) and no more than 22.5 tons per 12-month rolling time period for all HAPs. Based on the records reviewed, the highest emissions between February 2014 through February 2015 were 46 tons per 12-month rolling time period for CO, 27 tons per 12-month rolling time period for NOx, and 0.03 tons per 12-month rolling time period for VOCs (which includes the VOCs emitted from the glycol dehydrator), which are compliant with the permitted limits. DEQ was not concerned with the HAP emission limits since the VOC emission limits were so low.
- **Materials/Fuels:** Based on the records reviewed from February 2014 to February 2015, the fuel used ranged between 1578.23 mscf to 2047.35 mscf per month. The facility draws oil and gas from the Antrim formation at this location.
- **Process/Operational Parameters:** In reference to SC: 19, the facility must maintain maintenance logs to verify the engine is maintained and operating properly. Based on the records reviewed, the engine was properly maintained. During the inspection, DEQ observed a maintenance logs filled out with the daily engine parameters recorded. The maintenance records indicated the engine was shut down for a total of 66.65 hours from February 2014 through February 2015 for maintenance activities.
- **Testing Sampling Equipment:** In reference to SC: 15 and SC: 23, Chevron used engine specific emission factors to calculate the emissions for CO, NOx, and VOCs. Performance testing has not been completed at

this facility.

Monitoring/Recordkeeping: In reference to SC: 16, the facility monitors the monthly fuel consumption (which is previously discussed in Materials/Fuels above), and the glycol circulated through the dehydrator in gallons per minute (gpm). No storage tanks containing crude oil, condensate, or hydrocarbon liquids were located at the facility. The glycol recirculation rate was 0.67 gpm from the Antrim dehydrator.

Reporting: In reference to SC: 18, and facility reports annual emissions to the DEQ. Based on the most recent Michigan Air Emissions Reporting System (MAERS), the facility was in compliance.

Evaluation Summary: Based on the field inspection and records review, the facility is in compliance with PTI 601-96, and no further actions are necessary at this time.

NAME Camp Owens

DATE 3/17/15

SUPERVISOR 