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

N611925937	
FACILITY: BREITBURN OPERATING LP-BAGLEY 11	SRN / ID: N6119
LOCATION: NW/4, SE/4, SE/4, SEC 11, T30N, R3W, BAGLEY TWP	DISTRICT: Cadillac
CITY: BAGLEY TWP	COUNTY: OTSEGO
CONTACT: CAROLANN KNAPP, ENVIRONMENTAL SPECIALIST	ACTIVITY DATE: 06/26/2014
STAFF: Caryn Owens COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Field Inspection & Records Review	
RESOLVED COMPLAINTS:	

On Thursday, June 26, 2014, Caryn Owens of the DEQ-AQD conducted a scheduled on-site inspection of the Breitburn Operating, LP (Breitburn) – Bagley 11 facility (N6119) located in the northwest quarter, of the southeast quarter, of Section 11, T30N, R3W in Bagley Township, Otsego County, Michigan. More specifically, the site is located at the end of East Dixon Lake Road, approximately 0.25 miles north of the McCoy and East Dixon Roads intersection. The site is southwest of O'Rouke Lake. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 677-96. The site is currently an opt out source that has opted out of being a major source by limiting the operational and/or production limits potential to emit (PTE) to be below the major source thresholds. DEQ was unaccompanied during the field inspection, an inspection brochure was not given to anyone at this facility. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) Part 63 Subpart HH, and NESHAP 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 MDEQ, but possibly by the EPA. The weather was mostly cloudy, about 70°F, with calm winds from the southeast direction.

The equipment at the site consisted of two heater treaters; two jack pumps; four 400-barrel storage tanks connected to a vapor recovery unit, two bullet tanks that were disconnected and not in service, a blow down tank; a glycol dehydrator building; and compressor building. Heat shimmers were observed on one of the heater treaters and the glycol dehydrator reboiler. No other visible emissions or odors were present during the inspection. The glycol dehydrator is used to dry the field gas prior to transporting it to the sales line. DEQ observed a Caterpillar compressor engine, a separator, and waste oil and engine oil in approximately 200 gallon above ground storage tanks inside the compressor building. At the time of the inspection, one of the pipes of the compressor was covered in ice. The engine block was labeled GCS 773, was operating at 966 RPM and 70psi. There was a suction pressure of -1.1 psi. The engine contained a catalytic converter and an AFRC system. The pre-catalyst temperature was 816°F, and the post-catalyst temperature was 851°F. The stack on the compressor engine was approximately 18 feet above ground surface, and the stack of the glycol reboiler was approximately 20 feet above ground surface.

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 rolling time period of carbon monoxide (CO), nitrogen oxides (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 May 2013 through May 2014 were 4.66 tons per 12-month rolling time period for CO, 2.16 tons per 12-month rolling time period for NOx, and 19.9 tons per 12-month rolling time period for VOCs (which includes the VOCs emitted from the storage tank and glycol dehydrator), and 4.8 tons per 12-month rolling time period for total HAPs, all of which are compliant with the permitted limits.
- **Materials/Fuels:** Based on the records reviewed, fuel usage is recorded as "rich burn" (engine operating without catalyst) or "low emission" (engine operating with catalyst). From May 2013 to May 2014, no rich burn fuel usage was recprded, which means the engine was not operated without the catalytic converter within this time period. The fuel usage ranged between 0.79 to 1.03 mmscf per month, which was using the engine with the catalytic converter. The facility draws oil and gas from the Niagaran 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 did not operate without the catalytic converter from May 2013 to May 2014. According to SC: 21, the engine is allowed up to 48 hours per event, or 144 hours per calendar year to operate without the catalytic converter. During the inspection, DEQ observed maintenance logs filled out with the daily engine parameters recorded.

The total storage tank capacity at the facility was greater than 952 barrels. DEQ observed piping connected to the tops of the storage tanks that appeared to be associated with a vapor recovery unit.

- **Testing Sampling Equipment:** In reference to SC: 15 and SC: 23, Breitburn 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), monthly crude/condensate throughput to onsite storage tanks in barrels, monthly hydrocarbon liquid trucked, and the glycol circulated through the dehydrator in gallons per minute (gpm). The tank throughput ranged from 324 to 573 barrels per month. The amount of crude oil trucked from the site ranged from 198 to 624 barrels per month. The glycol recirculation rate was 0.23 gpm.
- 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 677-96, and no further actions are necessary at this time.

DATE SUPERVISOR

http://intranet.deq.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=245... 7/29/2014