

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

N610225951

FACILITY: BREITBURN OPERATING LP-BAGLEY 23		SRN / ID: N6102
LOCATION: SW NW NW SEC 23 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 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 23 facility (N6102) located in the southwest quarter, of the northwest quarter, of the northwest quarter, of Section 23, T30N, R3W in Bagley Township, Otsego County, Michigan. More specifically the site was located on the east side of Kryz Road, approximately 1/10<sup>th</sup> mile south of the East Johnson and Kryz Roads' intersection. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 660-96. 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. 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.

DEQ was unaccompanied during the field inspection, and an inspection brochure was not given to anyone at the facility. The weather was mostly cloudy, about 70°F, with calm winds from the southeast direction. There were two Brietburn employees when DEQ first arrived, but they left during the inspection. DEQ informed the employees about the inspection.

The site shares the property with Enervest (Ward Lake), who operates a glycol dehydrator and a compressor engine at the site, which was permitted under PTI 129-97A (N6080). The remaining equipment at the site consisted of: two heater treaters; five 400-barrel storage tanks, and one 300-barrel storage tank; a separator building; a glycol dehydrator building; and compressor building. There was a lighting system on the glycol dehydrator building that was not operating at the time of the inspection. The glycol dehydrator is used to dry the field gas prior to transporting it to the sales line. Steam was observed from the glycol dehydrator stack, with slight odors in the area, but dissipated quickly. No visible emissions were observed from the glycol dehydrator reboiler stack. The reboiler stack was approximately 16 feet above ground surface. A green light was observed on the lighting system for the compressor building. The compressor building contained a CAT389TA engine with a catalytic converter and an air to fuel ratio control (AFRC). The engine block was labeled as GCS875, and the engine was operating at 1063 RPM, and 60 psi. The inlet catalyst temperature was 939°F and the post catalyst temperature was 1000°F. DEQ observed waste oil and engine oil in approximately 200 gallon above ground storage tanks, and separators labeled Bagley 14 and Bagley 15 inside the compressor building.

### 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 0.82 tons per 12-month rolling time period for CO, 6.79 tons per tons per 12-month rolling time period for NOx, and 14.9 tons per 12-month rolling time period for VOCs (which includes the VOCs emitted from the storage tank and glycol dehydrator), and 4.14 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" (operating the engine without catalyst) or "low emission" (operating the engine with catalyst). From May 2013 to May 2014, no rich burn fuel usage was recorded, which means the engine was not operated without the catalytic converter within this time period. The fuel usage ranged between 2.01 to 2.65 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. On January 14, 2014 and April 23, 2014, the engine's oxygen was adjusted to achieve the 80 and 90 percent reduction across the catalyst.

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 a 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 Operating, LP used manufacturer's 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 0 to 219 barrel per month. The amount of crude oil trucked from the site ranged from 0 to 326 barrel per month. The glycol recirculation rate was 0.20 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 660-96, and no further actions are necessary at this time.

NAME Caryn Owens      DATE 7/14/14      SUPERVISOR [Signature]