

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

N610525964

FACILITY: BREITBURN OPERATING LP - BAGLEY 700		SRN / ID: N6105
LOCATION: NE SW SEC 12 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 and 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 700 facility (N6105) located in the northeast quarter, of the southwest quarter, of Section 12, T30N, R3W in Bagley Township, Otsego County, Michigan. More specifically, the site is located approximately ¼ mile north of East McCoy Road on Chester Road, and take the first service drive to the approximate center of Section 12. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 663-96. 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 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 DEQ. At the time of the inspection, the weather was mostly cloudy, about 70°F, with calm winds from the southeast direction.

The equipment at the site consisted of a blow down tank; a glycol dehydrator system and a compressor engine. There was a lighting system on the building that was lit green at the time of the inspection. A "Radiation Area" sign was located on the building near the door to access the glycol dehydrator. A separator was located inside the compressor and glycol dehydrator building. The glycol dehydrator is used to dry the field gas prior to transporting it to the sales line. The glycol dehydrator and reboiler stacks were approximately 20 feet above ground surface. A heat shimmer was observed from the glycol reboiler stack. DEQ observed a Caterpillar compressor engine equipped with a catalytic converter and AFRC operating at 720 RPM, and approximately 55 psi. The pre-catalyst temperature was 774°F, and the post-catalyst temperature was 792°F. The engine block was labeled GCS778, and the sheet on the clipboard had the engine classified as a Caterpillar 399TA. The stack on the compressor engine contained a muffler and was approximately 18 feet above ground surface. There were three 55 to 100 gallon above ground storage tanks on the southern portion of the site near the building that were labeled tri-ethylene glycol. DEQ observed steam exiting stacks which were approximately 20 feet above ground surface and 1.5 inch diameter, from a knockout tank connected to the glycol dehydrator. A sweet petroleum like odor was present outside near the southern portion of the building near the glycol above ground storage tanks.

### 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 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 5.5 tons per 12-month rolling time period for CO, 7.0 tons per 12-month rolling time period for NOx, and 1.4 tons per 12-month rolling time period for VOCs (which includes the VOCs emitted from the storage tank and glycol dehydrator), and 0.0 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 1.835 to 2.531 mmscf per month, which was using the engine with the catalytic converter. 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 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. No storage tanks greater than 200 barrel were located at this facility.

**Testing Sampling Equipment:** In reference to SC: 15 and SC: 23, Breitburn 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), and the glycol circulated through the dehydrator in gallons per minute (gpm). As previously stated, no storage tanks containing crude oil, condensate, or hydrocarbon liquids were located at the facility. The glycol recirculation rate was 0.25 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 663-96, and no further actions are necessary at this time.

NAME Caryn Owens

DATE 7/14/14

SUPERVISOR 