

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

N612725932

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| FACILITY: BREITBURN OPERATING LP - CHESTER 7-11 | | SRN / ID: N6127 |
| LOCATION: NE SE 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 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) – Chester 7-11 facility (N6127) located in the northeast quarter, of the southeast 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, at the southwest corner of Chester Road and the service drive that leads to the Breitburn – Bagley 700 site. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 685-96. 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. 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. The DEQ was unaccompanied during the field 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 were two iron sponge towers at the facility; the eastern iron sponge had a limp windsock at the top of it. According to Carolann Knapp of Breitburn, only one of the iron sponges is operational. A gas analysis for the facility is attached, and no hydrogen sulfide was detected. Additional equipment at the facility consisted of: a separator; an approximate 200 gallon waste oil above ground storage tank (AST); and an approximate 200 gallon engine oil AST located inside the compressor and glycol dehydrator building. The glycol dehydrator was used to dry the field gas prior to transporting it to the sales line. The glycol dehydrator stack was approximately 16 feet above ground surface, and the glycol reboiler stack was approximately 18 feet above ground surface. DEQ observed a Caterpillar compressor engine equipped with a catalytic converter and AFRC operating at 874 RPM, and approximately 49 psi. The pre-catalyst temperature was 874°F, and the post-catalyst temperature was 882°F. The engine back was labeled QS4392, and the sheet on the clipboard had the engine classified as a Caterpillar 398NA. The stack on the compressor engine contained a muffler and was approximately 30 feet above ground surface. No visible emissions or odors from the equipment or stacks were present during the inspection.

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 was 8.9 tons per 12-month rolling time period for CO, 4.1 tons per 12-month rolling time period for NOx, and 3.3 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, which are compliant with the permitted limits.

Materials/Fuels: Based on the records reviewed, fuel usage is recorded as "rich burn" (operating engine without catalyst) or "low emission" (engine operating 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 1.78 to 2.34 mmscf 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 did not operate without the catalytic converter from May 2013 to May 2014. The catalyst temperatures were inverted at the end of February 2014 and were corrected March 3, 2014. On March 3, 2014, the engine's oxygen was adjusted to achieve the 80 and 90 percent reduction across the catalyst. Breitburn corrected the problem with the inverted catalyst temperatures in a timely manner without the request of the DEQ.

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. 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). The glycol recirculation rate was 0.20 gpm from the Antrim dehydrator. As previously stated, no storage tanks containing crude oil, condensate, or hydrocarbon liquids were located at the facility.

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 685-96, and no further actions are necessary at this time.

NAME Caryn Owens

DATE 7/14/14

SUPERVISOR 