

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

N824228780

FACILITY: Breitburn Operating LP - ST. Garfield 9/10		SRN / ID: N8242
LOCATION: STATE GARFIELD 9/10 SEC 9, KALKASKA		DISTRICT: Cadillac
CITY: KALKASKA		COUNTY: KALKASKA
CONTACT: Carolann Knapp , Environmental Specialist		ACTIVITY DATE: 02/25/2015
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection & Records Review		
RESOLVED COMPLAINTS:		

On Wednesday, February 25, 2015, Caryn Owens and Shane Nixon of the DEQ-AQD conducted a scheduled on-site inspection of the BreitBurn Operating, LP (BreitBurn) – St. Garfield Tank Battery facility (SRN: N8242) located in the northwest quarter of Section 9, Township 25 North, Range 5 West in Garfield Township, Kalkaska, MI. More specifically the site is accessed by heading north on Maple Road, approximately ¾ miles north of the 8 Point Road and Maple Road intersection. The site is located on the west side of Maple Road just before Maple Road curves to the right and changes to 10 Point Road. It is recommended to have a H2S monitor during the inspection. The field inspection and records review were to determine compliance with permit to install (PTI) 40-09A. The site 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) Part 63 Subpart ZZZZ. The State of Michigan does not have delegated authority of this area source NESHAP, and thus these conditions were not reviewed by the DEQ at this time.

The site was covered in snow, and the weather conditions were partly sunny, with calm winds from the west-southwest, and approximately 10°F. A limp wind sock in the northeast direction was visible for the northeastern most above ground storage tank. The site is a natural gas processing facility where Richfield and DRZ gas is compressed and then sent to the DRZ plant via pipeline. The site consisted of two process heaters, two small compressor engines, eight 400 barrel above ground storage tanks with vapor recovery, a separator, and a flare. There is no glycol dehydrator at this facility. The southeastern engine at the facility is a 160 horsepower (hp) rich burn Waukesha F1197 GU generator engine with no control. At the time of the walkover, the Waukesha engine was operating at 40 psi and 200°F. An hour meter indicated the engine has been operating for 54344 hours. The engine on the northeastern portion of the site was a small 8 cylinder engine, which is an 88 hp GM Vortec 5.7 liter engine. BreitBurn claims this engine is exempt under R 285(g). The stacks for both engines appeared to be at least 25 feet above ground surface and both had steam plumes. No odors were present during the inspection.

Since the facility processes gas from the Richfield and DRZ fields, it's possible that the oil collected in the eight 400-bbl tanks contain hydrogen sulfide (H2S), Therefore, the tanks are equipped with vapor recovery that is connected with the on-site flare. DEQ observed no visible emissions from the flare.

Records Reviewed

EUENGINE1: A 160 hp rich burn Waukesha F1197GU natural gas fired generator reciprocating internal combustion engine with no control.

- **Emission Limits:** EUENGINE1 is limited to 37.3 tons per 12-month rolling time period of NOx and 45 tons per 12-month rolling time period of CO. Based on the records reviewed from January 2014 through January 2015, the highest emissions reported were 17.1 tons per 12-month rolling time period for NOx and 30 tons per 12-month rolling time period for CO. The emissions are compliant with permitted limits.
- **Process/Operational Parameters:** The facility submitted a Malfunction Abatement Plan (MAP) on August 13, 2013. Based on the maintenance records, EUENGINE1 was inspected approximately one to every three months from January 2014 through January 2015 for replacing filters, valves, spark plugs, gaskets, hoses, and/or repair leaks. The records did not show maintenance concerns with EUENGINE1.
- **Testing Sampling Equipment:** BreitBurn used engine specific emission factors to calculate the emissions for NOx and CO. Performance testing has not been completed at this facility.
- **Monitoring/Recordkeeping:** The facility continuously monitors the natural gas usage for EUENGINE1. The natural gas usage ranged between 410 to 527 thousand standard cubic feet per month.
- **Reporting:** The facility has not swapped out an engine at the facility since the PTI was issued.
- **Stack/Vent Restrictions:** Based on visible observations during the field inspections, the stack of the engine appeared to be at least 25 feet above ground surface, in compliance with the permitted limits.

FGFACILITY: All process equipment at the site, including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

- **Emission Limits:** FGFACILITY is limited to 46 tons per 12-month rolling time period of NOx and 89 tons per 12-month rolling time period of CO. Based on the records reviewed from January 2014 through January 2015, the highest emissions reported were 21 tons per 12-month rolling time period for NOx and 47 tons per 12-month rolling time period for CO. The emissions are compliant with permitted limits.
- **Process/Operational Parameters:** As previously stated in EUENGINE1, the facility submitted a Malfunction Abatement Plan (MAP) on August 13, 2013. The MAP covers both engines at the facility. The records did not show maintenance concerns with engines at the facility.
- **Testing Sampling Equipment:** This facility receives the fuel gas for the compressor engine and generator engine from the BreitBurn – Garfield 1-8, 8-9 facility located approximately ¼ mile away, and based on fuel gas analysis, hydrogen sulfide was not detected above laboratory method detection limits.
- **Monitoring/Recordkeeping:** The records submitted by BreitBurn were well kept in a format acceptable to the DEQ. The 12-month rolling time period emission calculations are reported above, under Emission Limits, and were within the permitted limits.
- **Reporting and Stack/Vent Restrictions:** Reporting and Stack/Vent Restrictions did not have applicable conditions for FGFACILITY.

Evaluation Summary: Based on the field inspection and records review, the facility is in compliance with PTI 40-09A. No further action is deemed necessary at this time.

NAME Caryn Owens

DATE 3/12/15

SUPERVISOR 