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

N656040197

FACILITY: BreitBurn Operating LP-LIVINGSTON 31 CPF		**SRN / ID:** N6560
LOCATION: SE4, SW4, Sec 31, T31N, R3W (gt 4/12/07), LIVNGSTON TWP		**DISTRICT:** Cadillac
CITY: LIVNGSTON TWP		**COUNTY:** OTSEGO
CONTACT: Carolann Knapp , Environmental Specialist		**ACTIVITY DATE:** 06/07/2017
STAFF: Caryn Owens	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Wednesday, June 7, 2017, Caryn Owens of the DEQ-AQD conducted a scheduled on-site inspection of the BreitBurn Operating, LP (BreitBurn) – Livingston 31 facility (SRN: N6560) located in the Southeast quarter of the southwest quarter of Section 31, Township 31 North, Range 3 West in Livingston Township, Otsego County, Michigan. More specifically the site is located north of M-72, approximately 1/3 mile east of the M-32 and North Townline Road Intersection in Gaylord, MI. The driveway to the site is approximately 1/10 mile gravel drive. The field inspection and records review were to determine compliance with permit to install (PTI) 34-99. The site is currently an area source for hazardous air pollutants (HAPs). The facility has opted out of major source applicability by limiting operational and/or production limits potential to emit (PTE) to below major source thresholds. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart HH, and NESHAP 40 CFR 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 this time.

Evaluation Summary
The activities covered during this full compliance evaluation (FCE) appear to be in compliance with PTI 34-99. Review of the records for the facility indicates the facility was in compliance with emission limits in accordance to the PTIs. No further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

Source Description:
The weather conditions were sunny, with calm winds approximately 0-5 miles per hour from the west-southwest, and 75 degrees Fahrenheit. The site is a natural gas processing facility where the natural gas is extracted from the Antrim formation with two compressor engines, a glycol dehydrator system, and one approximately 400 barrel (bbl) above ground storage tank. There is a concrete pad on the northern portion of the site that appeared to formerly contain a compressor engine.

The compressor engine on the northwest portion of the site was labeled GCS 863 on the base of the engine platform, and the paper used for recordkeeping indicated the engine was a Caterpillar 3516, Aerial JGH-4 engine, Unit #863 and Serial #4EL00232. The engine was operating at 1,120 revolutions per minute (RPM), 52 pounds per square inch (psi) of pressure, and 180 degrees Fahrenheit. The engine appeared to have a catalyst, but I couldn't find where the inlet and outlet temperatures of the catalyst were displayed. The stack for this engine appeared to be at least 35 feet above ground surface, and I observed no visible emissions from the stack.

The southeastern-most engine was labeled GCS 859 on the base of the engine platform, and the paper used for recordkeeping indicated the engine was a Caterpillar 3516, Aerial JGH-4 engine, Unit #859 and Serial #4EK04923. The engine was operating at 1,151 RPM, 54 psi, and 190 degrees Fahrenheit. The engine appeared to have a catalyst, but I was not able to read the catalyst inlet and outlet temperatures without touching buttons. I did not touch any buttons, since I wasn't sure what the buttons actually went to. The stack for this engine appeared to be at least 35 feet above ground surface, and I observed no visible emissions from the stack. Based on the types of engines at the facility, it appears the catalysts would be oxidation catalysts, since the engines are lean burn engines.

The glycol dehydrator system was in the northwestern –most building. DEQ observed no visible emissions from the glycol dehydrator system. The stack of the glycol dehydrator system was approximately 22 feet above ground surface, and the glycol reboiler stack was approximately 16 feet above ground surface.

BreitBurn claims the above ground storage tank meets exemption - Rule 336.1284(2)(e) which exempts sweet crude oil storage vessels that have capacity less than 40,000 gallons, and claiming the glycol dehydrator meets

exemption R 336.1288(2)(b) which exempts a glycol dehydrator located at a facility that only processes natural gas from the Antrim formation.

Records Reviewed

- **Emission Limits:**
  Special Condition (SC) 1: - The Nitrogen oxide (NOx) emission rate from all the engines at the facility is limited to 70.4 tons per 12-month rolling time period. Based on the records reviewed from May 2016 through April 2017, the highest emissions reported for NOx were 25.6 tons per 12-month rolling time period. The emissions were compliant with permitted limits.

- **Material Usage Limits**
  PTI 34-99 contained no applicable material limits for the site.

- **Process/Operational Parameters:**
  PTI 34-99 contained no applicable Process/Operational Parameters for the site.

- **Deign/Equipment Parameters**
  PTI 34-99 contained no applicable Design/Equipment Parameters for the site.

- **Testing**
  SC 3: The facility uses emission factors derived from engine specific spec sheets. Since PTI 34-99 was issued, no stack testing has been completed on the engines.

- **Recordkeeping/Reporting/Notification**
  SC 2 & 3: - The facility completes all calculations in formats acceptable by the DEQ, and the records are properly maintained. The facility reported monthly and 12-month rolling time period records: of the amount of natural gas burned at the facility and emission rates of NOx. Additionally, the facility submitted maintenance logs completed for the engines. Based on the maintenance records, the engines were serviced 1 to 2 times per month from for replacing filters, valves, spark plugs, gaskets, hoses, and/or repair leaks. It should be noted that oxidation catalysts only affect carbon monoxide (CO) and volatile organic compound (VOC) emissions, and there are no permitted CO and VOC emissions limits for the facility. Therefore, I did not request additional catalyst maintenance information.

- **Stack/Vent Restrictions:**
  SC 4: - During the field inspection, the stacks height and diameters associated with the engines appeared to be in compliance with the permitted limits.

NAME Caryn Owens DATE 6/7/17 SUPERVISOR SN