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

N703131473

FACILITY: BREITBURN OPERATING LP - FRASER 8 CPF		**SRN / ID:** N7031
LOCATION: Fraser Twp, Section 8, T16N, R4E, FRASER TWP		**DISTRICT:** Saginaw Bay
CITY: FRASER TWP		**COUNTY:** BAY
CONTACT: Carolann Knapp ,		**ACTIVITY DATE:** 08/31/2015
STAFF: Benjamin Witkopp	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled inspection of Fraser 8 CPF		
RESOLVED COMPLAINTS:		

On August 31, 2015 Ben Witkopp of the Michigan Department of Environmental Quality - Air Quality Division (MDEQ-AQD) met with Kevin Clennan of Breitburn at the Breitburn Fraser 8 gas compressor & dehydration facility. Kevin is the facility operator. Kevin said required records were available through Carolann Knapp of Breitburn. The facility is covered by air use permit to install 301-01B. The permit has limits for NOx, CO, and VOC emissions. The NOx and CO limits are capped at 89 tpy so they keep the facility from being a major source and subject to Title V. The facility is subject to NSPS for Equipment Leaks of VOC from Onshore Natural Gas Processing Plant - 40 CFR Part 60, Subpart A and KKK. It is also subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) – 40 CFR Part 63, Subparts A and ZZZZ.

The facility processes wet natural gas from three wells at this point in time. One is the Lahar 1-7, another is the Pross 1-12 and the last is the Garbolinski 1-11. At one time gas was also provided by the State Fraser 2-18 and the Geno 1-18. However, both wells are shut in now. The last three wells mentioned are owned by Northwood Energy.

The facility is comprised of heaters, a dehydrator, and compressors. Natural gas liquids (NGLs) are removed, as is water, to make pipeline quality natural gas. The gas is then compressed before entering the pipeline.

The glycol used at the facility is recirculated in a closed loop. The dehy has serial number 01694. The glycol heater does have a stack for exhaust. Though two dehydrators are on site only one is being used. The other unit is completely disconnected from the facility. The permit specifies a maximum glycol recirculation rate of 3.0 gallons per minute. When records were checked the daily totals were typically 320 to 350 gallons per day. The highest value was from June 8th at 500 gpd. These levels (about 0.3 gpm or less) are well below the 3.0 gpm limit. Kevin said the target is about 350 gpd.

The engines on site are not subject to NSPS JJJJ for Stationary Spark Ignition Engines due to the manufacturing dates though relocated to the site after July 2007.

There are five engines on site. The propane recirculating compressor engine is C-130 Cat 3306 rated at 208 hp. It typically used 13-17 Mcfd to power an Ariel JG/2 compressor. The exhaust (entering the catalyst) was 859 F and 886 upon exit. The production compressor engine is C-928 Cat 3516 rated at 930 hp. It used about 59 Mcfd to power an Ariel JGR/4 compressor. The exhaust (entering the catalyst) was 870 F and 875 upon exit. The booster compressor engine is C-970 Wauk 379. The hp rating could not be determined because there was not a plate found on the unit. It used about 63 Mcfd to power a Worthington compressor. The exhaust (entering the catalyst) was 854 F and 888 upon exit. Another engine C-136 Cat 3306 rated at 208hp is not used much and had 0 mcfd. If used, it powers an Ariel JG/2 compressor. Lastly, C 301, a Cat engine, hasn't been turned over in at least 4 years according to Kevin. Kevin said that after an any engine change-out, the engine is run for about 20 minutes without the catalyst. This action is allowed in the context of the permit. Records showed for the last 12 months a total of 1.5 hrs of operation were run without the use of a catalyst.

The facility has a contract with Exterran for engine maintenance and performance monitoring. The results of their activity are given to Brietburn and input into a maintenance database.

Kevin said Carolann Knapp keeps the records for the facilities so they were subsequently requested. The dehys have a limit of 24 tons of VOC during a 12 month rolling time period. Individual monthly records have tiny fractions of a ton each month (usually 0.02) so there is nothing close to the limit on a 12 month basis. However the method used to determine the 12 month rolling time period values are suspect. The value never changed even though the individual month values did. Perhaps it is due to rounding.

Engine B (for the production compressor) has 12 month rolling limits for NOx of 19.9 tpy and CO of 14.2

tpy. The facility, as an entity, has NOx and CO limits of 89 tpy based on a 12 month rolling time period. Records for engine B indicated about 6 tons of NOx and about 5 tons of CO per 12 month rolling time period. These values are well below the permit limit. The total facility limits were also checked. The NOx and CO values were the sum of those from the heaters, FGengines, and engine B. The tons per 12 month rolling time period values for NOx and CO are 18.8 and 18.9 respectively. These emissions are well below permit limits.

The facility is subject to NSPS subpart KKK. However, the capacity of the production compressor is 5.8 million scfd (<10 MM) & it is in wet gas service. The propane compressor is equipped w/a closed vent system. Therefore, VOC monitoring requirements are only for weekly visual inspections of pumps & valves in light liquid service & annual inspection of the propane compressor.

The facility is considered to be in compliance.

NAME B. Lithop DATE 9-29-15 SUPERVISOR C. Hare