

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

N607646306

FACILITY: BREITBURN OPERATING LP - MONITOR 11 CPF		SRN / ID: N6076
LOCATION: THREE MILE RD, BAY CITY		DISTRICT: Saginaw Bay
CITY: BAY CITY		COUNTY: BAY
CONTACT: Carolann Knapp ,		ACTIVITY DATE: 09/26/2018
STAFF: Benjamin Witkopp	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Site inspection and records review		
RESOLVED COMPLAINTS:		

On September 26, 2018 Ben Witkopp of the Michigan Department of Environmental Quality - Air Quality Division (MDEQ-AQD) stopped at the Monitor 11 gas compressor & dehydration facility. It was not operating at the time. Required records were available and received through Carolann Knapp of Breitburn. The facility is covered by air use permit to install 628-96C. The permit has limits for NO<sub>x</sub>, CO, and Benzene emissions. The NO<sub>x</sub> 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 four wells at this point in time. One is the Rae 1-12, another is the Prevost 1-11, third is the Shepard 1-2, and the last is the Walczaki 1-7. At one time gas was also provided by the Dobson 1-8, Francis 1-1, and the Vermeesch 1-21. However, these last three wells are not producing now. The facility used to process 25 MMcfd but it is now down to about 1 MMcfd.

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 glycol heater does have a stack for exhaust. The permit specifies a maximum glycol recirculation rate of 0.42 gallons per minute. When records were checked the daily totals were typically 300 gallons per day. The highest value was from July 28, 2017 at 410 gpd. That highest level (about 0.28 gpm) was well below the 0.42 gpm limit. The temperature of the air cooled condenser exhaust gas was 68 f. The highest was found in May 24, 2018 at 90 f. The temperatures are well below the permit limit of 120.

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 two engines on site. Engine 1, for production, unit 784, is a 399TA Cat rated at 930 hp. It typically used 1,200 to 1,300 Mcf per month to power an Ariel JGR/4 compressor. The exhaust (entering the catalyst) was in the 800 to 850 f range and exited slightly higher. Engine 2, for recirculation, unit 300 is a 342 NA Cat rated at 225 hp. It used about 400 to 600 Mcf per month to power an Ariel JG/2 compressor. The exhaust (entering the catalyst) was in the 700 to 850 f range and exited slightly higher.

Records showed for the last 12 months a total of 0 hrs of engine operation were run without the use of a catalyst.

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

The dehy has a limit of 0.5 tons of benzene during a 12 month rolling time period. Individual monthly records have extremely tiny fractions of a ton each month (usually around 0.001) so there is nothing close to the limit on a 12 month basis.

Engine 1 (for the production compressor) has 12 month rolling limits for NO<sub>x</sub> of 20 tpy and CO of 15 tpy. Engine 2 (for the recirculation compressor) has NO<sub>x</sub> and CO limits of 28 and 30 tpy based on a 12 month rolling time period. Records for engine 1 indicated about 2 tons of NO<sub>x</sub> and about 3.5 tons of CO per 12 month rolling time period. These values are well below the permit limit. Engine 2 tons per 12 month rolling time period values for NO<sub>x</sub> and CO are about 0.1 and 0.18 respectively. These emissions are well below permit limits. The facility limits for NO<sub>x</sub> and CO are both 89 tpy based on a 12 month rolling time period. NO<sub>x</sub> levels were about 3.5 tpy while CO levels were around 6.3 tpy. Both amounts are well below permit limits.

The facility is subject to NSPS subpart KKK. However, VOC monitoring requirements are only for weekly visual inspections of pumps & valves in light liquid service & annual inspections.

The facility is considered to be in compliance.

NAME B. Zutty

DATE 10-10-18

SUPERVISOR C. Hare