

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N135557903

FACILITY: BREITBURN OPERATING LP - FOSTER 28 CPF		SRN / ID: N1355
LOCATION: HEATH ROAD, ROSE CITY		DISTRICT: Bay City
CITY: ROSE CITY		COUNTY: OGEMAW
CONTACT: Joe LaTulip , Area Superintendent		ACTIVITY DATE: 04/28/2021
STAFF: Nathanael Gentle	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled On-site Inspection		
RESOLVED COMPLAINTS:		

On April 28, 2021, AQD staff conducted a scheduled onsite inspection at Breitburn Operating LP- Foster 28 CPF. Staff arrived onsite at 9:50 AM and departed at 11:05 AM. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment Great Lakes and Energy, Air Quality Division (AQD) Administrative Rules; and to evaluate compliance with the facilities Permit to Install (PTI), PTI No. 655-96. AQD staff were assisted onsite by Mr. Joe LaTulip and Mr. Greg Dodge. Requested records were provided by Mr. Ryan Donina. At the time of inspection, the facility was not in operation.

Facility Description and History

The Breitburn Operating LP- Foster 28 CPF is located in Rose City, Ogemaw County, MI. The facility is located approximately 1.5 miles east of the intersection of Fairview Rd and Heath Rd. Bounded by state land on all sides, there are no residences in the immediate vicinity of the facility. The road leading up to the facility is a maintained gravel road.

As a central processing facility, the facility extracts condensate consisting of oil, natural gas, water, and other liquids from seven different wells located near the facility. Wells pull condensate from the PDC zone, approximately 10,000 to 10,500 ft below the surface. The sweet condensate is then brought to the facility for processing in which components are separated into oil condensate, natural gas condensate, and water.

Breitburn Operating LP- Foster 28 is a minor source of HAPs and a synthetic minor source for NOx, CO and VOCs. One active Permit to Install (PTI) is associated with the facility, PTI No. 655-96. The permit was originally issued to Shell Western E&P. Prior to issuance of PTI No. 655-96, a previous permit was associated with the facility, PTI No. 343-86. Also issued to Shell Western E&P, PTI No. 343-86 was voided on April 17, 2000. The facility was originally built and operated by Shell Western E&P. Throughout the years the facility has gone through changes in ownership. Currently, the facility is operated as a Breitburn facility. Breitburn is owned by Maverick Resources. Correspondence with facility personnel all had Maverick Resources emails and email signatures.

The facility was last inspected in June 2016. The facility was found to be in compliance during the last inspection. There are no complaints or letters of violation associated with the facility.

Activities and Emissions

As previously mentioned, the facility was not in operation at the time of inspection. The facility was last operated in January 2019. Operation of the facility was shut down due to the decline in gas prices. Facility personnel said there is potential for the facility to be started back up in the future, depending on profit margins. Being the facility was not in operation, the onsite inspection consisted of verifying what equipment was onsite and reviewing what processes and procedures would take place during normal operation. As the facility has undergone changes in ownership throughout the years, the equipment and procedures used onsite have changed. As these changes were made, new equipment was installed while much of the old equipment remained onsite, not in use. Below is a table summarizing the equipment observed while onsite and whether it is operated during normal operation activities.

Equipment	Operated During Normal Operation	Comments
Waukesha Engine and Cub OF6SU2 Compressor Frame	No	The compressor engine is no longer onsite, only the frame and various parts. A rule 278 exemption demonstration was submitted for the change-out.
Caterpillar Engine and Ariel Compressor Package	Yes	Reciprocating, internal, combustion engine (RICE) is reported to be remote SI, 4-stroke, lean burn of >500 hp. Construction date reported to be 1994. Located in a separate building. The engine had a note attached to it saying it was mothballed on 4/12/2019. Facility personnel said the mothballing process includes draining fluids out of the engine and is typically done within 60 days of shutting down a facility.
Heater-Treater(s)	No	Still in place onsite, but not operated.

Glycol Dehydrator	No	The original glycol dehydrator is still onsite. However, no pipes are connected to the equipment.
Glycol Dehydrator	Yes	Rated at 200,000 Btu.
3 Phase Separator	Yes	Located in same building as the glycol dehydrator and heater treater.
Heater Treater	Yes	Located in the same building as the glycol dehydrator and a 3-phase separator.
Four 400-bbl Crude Oil ASTs	Yes	Plumbed for vapor recovery.
Horizontal AST	No	Approximate volume of 738 bbl.
Crude Oil Loadout Station	No	The original crude oil loadout station is still located onsite at the west end of the facility.
Crude Oil Loadout Station	Yes	The loadout station that would be used during normal operations is located in front of the above ground storage tanks.
Saltwater Storage Tank	Yes	Salt water is sent to the storage tank before being reinjected into the ground.
Miscellaneous Storage Containers	Yes	Various storage containers were observed onsite for storing materials such as methanol and fuel. Based on sizes and contents, containers appear to meet one or more R.284 exemptions.

Flare	Yes	A flare is located onsite. Facility personnel said the flare is used during compressor blowdowns and can be used in emergencies.
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Condensate is pumped from the wells to the facility where it first passes through the 3-phase separator. The 3-phase separator separates the mixture into 3 parts, oil and other liquids, gas, and water. Water is sent to the water storage tank until it is reinjected at the reinjection well. Salt water is reinjected into the disposal zone at 3500 to 4000 ft below the surface. Oil and other liquids are sent from the 3-phase separator to the heater treater where gas can be flashed off and oil and other liquids can be further separated. After the heater treater, the oil is sent to one of the four above ground storage tanks where it will eventually be trucked offsite. Gas removed at the 3-phase separator travels to the compressor. From there it is sent to the glycol dehydrator to remove water. Glycol is recycled and added when needed. Glycol material usage is tracked. Once moisture is removed from the gas, the gas is sent down the pipeline. NGL extraction is not conducted at this facility.

As part of this inspection, a records request was submitted, and the requested records were provided in a timely manner. Records for the last 24 months were requested. Being the facility had not been operated during the last 24 months, records of material throughputs and emission calculations were all zero. The facility utilizes Appendix A in PTI No. 655-96 to record usage and calculate emissions. Emission factors used in the table provided match those in the original permit, except the emission factors used for the compressor engine. Previous inspection reports indicate the values used by the facility for the compressor engine are those provided by the manufacturer. In addition, the emission factors used to calculate emissions from the compressor are higher than those included in Appendix A at permit issuance.

Special condition (S.C.) 16 requires that process data be tracked, and records maintained for two years of: monthly fuel consumption, in MMcf, monthly crude/condensate throughput to the tanks, in bbls, monthly hydrocarbon liquid trucked, in bbls, and glycol circulated through the dehydrator, in gallons per minute (gpm). Monthly records for February 2019 to February 2021 were provided. Being the facility was not operated during that period, all values were recorded as zero. Onsite personnel said when a facility is operated, these values are collected daily by onsite personnel. Fuel consumption is measured by meters on the equipment. Crude oil/ condensate throughput and liquid trucked are measured and calculated using gages dropped in the tanks that monitor fluid levels within the tanks. Gas processed at the facility is measured using gas flow meters to sales. The information collected is then provided to environmental personnel located in Houston, TX. Being the facility was not in operation, monitoring of the site is conducted monthly.

Process data collected is used to calculate annual emissions of Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Oxides of Nitrogen (NOx), and Hazardous Air Pollutants (HAP); These calculations are then used to demonstrate compliance with S.C. 13 and S.C. 14. Emissions of CO, VOC and NOx shall not exceed 99 tons per year based on a twelve-month rolling period, S.C. 13. Being the facility was not operated, emissions during the provided record period were zero for CO

and NOx. A value of 0.1 tons of VOC for the 24-month period was listed in the records, well below the permitted limit. The calculation was based on tank capacity and the corresponding emission factor. The annual emission rate of any individual HAP shall be maintained below 10 tons per year based on a 12-month rolling period and the annual emission rate a total HAPs shall be maintained below 25 tons per year based on a 12-month rolling period, S.C. 14. Emissions of HAPs for the 24-month period of records received was 0 tons. Actual emission levels are required to be reported annually, S.C. 18. This requirement is met with annual report submittals to MAERS. The facility has historically submitted reports in a timely manner. The most recent report for emissions during the year 2020 was submitted on 2/19/2021.

The facility is required to conduct all necessary maintenance and make all necessary attempts to keep all components of the process equipment in proper operating conditions. In addition, the facility shall maintain a log of all significant maintenance activities conducted and all repairs made, S.C. 19. Records of maintenance activities conducted over the last 24 months were requested. The last maintenance activity conducted onsite was the mothballing of the compressor in April 2019. Onsite personnel said under operating conditions, repairs are made on an as needed basis. In addition, maintenance such as tune-ups and oil changes would be conducted routinely.

S.C. 24 requires that the facility only processes sweet gas, as defined in Rule 119. A certificate of gas analysis from July 9, 2018 was provided. No hydrogen sulfide or sulfur was measured in the provided analysis. Therefore, the gas processed meets the AQD definition of sweet gas.

Pursuant to S.C. 22, records of determination were requested for applicability to the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR, Part 60, Subpart KKK, Onshore Natural Gas Processing Facilities. A statement was provided stating the facility is not subject to the subpart as the facility does not extract natural gas liquids from field gas.

Review of 40 CFR Part 63, Subpart ZZZZ was conducted to determine RICE MACT subjectivity for the reciprocating internal combustion engine (RICE) associated with the facility. Based on the engine specifications and as an area source, RICE MACT requirements consist of maintenance activities including changing oil/filter, inspecting spark plugs, and inspecting hoses/belts every 2,160 hours of operation or annually. The engine is reported to have been constructed in 1994. Being the construction date is before 7/1/2007, the RICE located at the facility does not appear to be subject to the NSPS at 40 CFR 60, Subpart JJJJ.

Being all crude oil or condensate storage tanks onsite have a capacity less than 952 barrels, S.C. 20 requiring the installation and proper operation of pollution control equipment does not apply. In addition, S.C. 21 restricting the malfunction of an air pollution control device, also does not apply.

Summary

At the time of inspection, Breitburn Operating LP- Foster 28 CPF was not in operation. An onsite inspection was conducted to verify the facility was not operating and to review equipment located onsite. Requested records were provided in a timely manner and reviewed. Based on the information provided, the facility appears to be in compliance.

Nathanael Gentle

NAME

5/5/2021

DATE

SUPERVISOR Chris Hare