

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

N676447977

FACILITY: DCP West Branch Compressor Stn		SRN / ID: N6764
LOCATION: M-55 West of Simmons Rd, WEST BRANCH		DISTRICT: Saginaw Bay
CITY: WEST BRANCH		COUNTY: OGEMAW
CONTACT: Bob Hipsher , Field Operator		ACTIVITY DATE: 02/28/2019
STAFF: Meg Sheehan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled site inspection for FY19		
RESOLVED COMPLAINTS:		

On Thursday, February 28, 2019, a scheduled site inspection was conducted by AQD District staff at DCP Midstream West Branch Compressor Station in West Branch, Ogemaw County. DCP representative Bob Hipsher (Field Operator) was onsite to answer questions and provide a tour of the facility. The facility was not in operation upon arrival. Site inspection activities were conducted with the intent of confirming compliance with Permit to Install (PTI) No. 16-00.

FACILITY DESCRIPTION

The DCP Compressor Station (DCPCS) sits on approximately 10 acres of former agricultural property located east of West Branch on M-55. It is bounded to the east by Dam Road, to northeast by County Highway F 24, to the north by West Finerty Road, to the west by Simmons Road and to the south by M-55. It is located at the end of a service road named "Lou Ann Lane" according to Google Earth (attachment 1). The facility is located amongst large parcels of privately-owned lands, with a limited number of residences located along M-55.

It is a fenced, remotely operated, unmanned facility. Maintenance issues are handled locally by Correct Compression. Compressors, controls, and monitoring equipment are in enclosed structures onsite. A review of the PTI application 16-00 indicated that the facility was constructed in 2000.

PTI No. 16-00 was issued on March 10, 2000. At the time of permitting, the facility was identified as a synthetic minor for nitrogen oxides (NOx) and carbon monoxide (CO), having accepted operating restrictions to ensure they remained below Title V thresholds. The facility feeds supplemental gas to pressurized product lines during peak demand periods, so its operating hours are relatively low. It is reported to process dry gas with very little liquids. No odorants are added at this point in the pipeline, as they have already been added before the product reaches this station.

COMPLIANCE HISTORY

No recent complaints are of record for the facility. At the time of the most recent site inspection (January 2017), the facility was found to be in compliance with its PTI and air rules. The facility is required to report to MAERS and has done so in a timely manner for the past several years.

EQUIPMENT

The DCPCS consists of four natural gas fired compressors with 3516 Caterpillar 1305 BHP engines. They are 4-stroke, lean burn, reciprocating engines (EUENGINE1 through 4, aka FGENG1-4). Based on the location of the facility, the engines appear to meet the definition of remote. They are located two each in two unheated buildings onsite.

Each compressor is associated with a small scrubber to remove/collect liquids in the incoming gas stream, and a large tube-style cooler at the end of the compressor. The cooler acts like a radiator to remove heat from the gas created during compression prior to it entering the main line. Exhausts for each of the engines run from the engine through the catalytic oxidation system (located outside the building), then out the stack associated with the oxidizer for each engine. The catalytic oxidation system for each engine was reported to meet T-BACT requirements at the time of permitting. No monitors have been installed on the catalytic oxidation system.

COMPLIANCE EVALUATION

Special Conditions 2 & 3 – Records provided electronically by Mr. Chad Winn (Senior Environmental Specialist with DCP) on March 4 indicate FGENG1-4 is well below its permit limits for NOx (28.8 lb/hr and 89.4 tpy) and CO (7.2 lb/hr and 22.3 tpy) for 2017, 2018, and January and February of 2019. Emission factors used for the calculation of NOx and CO emissions appear to come from the September 3, 2003 stack testing, which demonstrates compliance with the hourly emission limits (attachment 2).

Special Condition 4 – Based on visual observations, the stacks associated with each engine/catalytic oxidation system appear to meet the height and width requirements outlined in the PTI.

Special Condition 5 – As previously stated, the exhaust for each engine is routed through a catalytic oxidation system before it is emitted to the ambient air. Because the engines were not operating at the time of the inspection, visible emissions could not be evaluated (which may indicate proper/improper operation of the oxidation system). However, the exhaust stack for each engine was visibly routed to the catalytic oxidation system.

Special Condition 6 – The records that were provided also list the hours each engine is run for each month (attachment 2). FGENG1-4 operated well below its permit limit of 24,800 hours per 12-month rolling time period for 2017, 2018, and January and February of 2019. Hourly operating totals are recorded onsite and submitted to other offices, where the data is compiled and maintained.

A brief review of federal regulations appears to indicate that based on the date of installation (pre-2005), the facility is not subject to 40 CFR Part 60, Subpart JJJJ. However, based on the non-emergency status, the engine specifications (>500 HP, 4 stroke, lean burn, spark ignition), the remote location, and the facility's status as a minor source of Hazardous Air Pollutants (HAPs), the facility is subject to one or more requirements under 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Currently, Subpart ZZZZ is not delegated to the MDEQ for area sources, so compliance with this subpart was not evaluated.

COMPLIANCE DETERMINATION

At this time, the DCP Midstream West Branch Compressor Station appears to be in general compliance with PTI 16-00.

NAME Meg Sheehan

DATE 3/5/19

SUPERVISOR C. Hance