

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

N781738785

FACILITY: JORDAN DEVELOPMENT COMPANY, L.L.C.- MILTON BRADLEY		SRN / ID: N7817
LOCATION: 4600 CAIRN HWY, KEWADIN		DISTRICT: Cadillac
CITY: KEWADIN		COUNTY: ANTRIM
CONTACT: Troy Molby ,		ACTIVITY DATE: 02/16/2017
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2017 FCE compliance inspection and records review.		
RESOLVED COMPLAINTS:		

2017 Full Compliance Evaluation.

I conducted a scheduled compliance inspection and records review of the Jordon Development Company (JDC) Milton-Bradley CPF. The Milton-Bradley CPF is an opt-out facility with PTI 193-07. At the time of the inspection the facility consisted of the following equipment: Two stationary brine tanks within a lined containment dike. The tanks were not connected to a VRU but were connected to an on-site disposal well. There were no heaters, flares or NGL separation equipment. There was one dehydrator located inside the compressor building which was operating at the time of the inspection, no odors were noted. The dehy was vented outside the building but there were no visible emissions.

The compressor building also housed two compressor skids with internal combustion engines. PTI application 193-07 indicates there is one Caterpillar 399 TA V-16 830 hp. engine (EUENGINE1) equipped with a catalytic converter. Additionally, AQD had previously received notifications from JDC that a Caterpillar 3516 LE (Engine 2) was also installed. At the time of the inspection there was a catalyst equipped Caterpillar V-16 (EUENGINE1) in the north end of the building and a Caterpillar V-16 with no catalyst (Engine 2) in the south end. The glycol dehydrator was located between the two engines. There only appeared to be one gas use meter in the building.

At the time of the inspection EUENGINE1 was running at 1106 RPM and oil pressure was 60 psi. The catalyst inlet temperature was 1,039 degrees F and the outlet temperature was 1,047 degrees F. EUENGINE1 was also equipped with an Air Fuel Ratio Controller which had the following readings:

	Voltage	Stepper Motor Position
Left	.759v	935
Right	.745v	704

The engine was equipped with a stack that appeared to meet the permit requirements of 8" maximum diameter and 38' minimum height. There were no visible emissions from the stack.

Records for EUENGINE1 were reviewed and indicate that NOx emissions are 5.48 tons per year and CO emissions are 4.62 tons per year. PTI 193-07 NOx emission limits are 19.0 tons per year and CO limits are 13.0 tons per year. The engine did not operate without the catalyst during the review period. Engine maintenance records are maintained and were provided (attached).

Engine 2 was running at 1202 RPM and oil pressure was 70 psi. This engine is a lean burn, low emitting engine and is not equipped with a catalytic converter. Records indicate is equipped with an AFRC but this was not observed at the time of the inspection. On November 19, 2007 the AQD was notified by JDC that Engine 2 was to be installed and that the total maximum potential emissions for the site following installation would be below exemption limits (significance levels) (Rule 278) of 40 tons per year NOx and 100 tons per year CO. At that time AQD conducted an analysis that indicated if the engine was 40% efficient it could meet the Rule 285(g) PTI exemption for having less than 10 MMBtu/hr. heat input. As a result a PTI was not required at that time.

A review of recordkeeping for Engine 2 provided by JDC for this inspection indicated that the heat input may be slightly greater than 10 MMBtu (see attachment) which would require the engine to be permitted. As a result, additional information was requested from JDC to demonstrate compliance with the Rule 285(g) exemption. A response was received on March 1, 2017 (attached) that includes a manufacturers engine data sheet and revised Fuel Use and Calculation of Monthly Emissions record that revise the heat input to 9.92 MMBtu and NOx and CO emissions of 12.74 TPY and 20.46 TPY respectively.

The iron sponge on-site is for H2S removal since the gas from this facility's wells average 10 - 15 ppm H2S which is too high for pipeline sales and requires treatment.

A Malfunction abatement plan was most recently updated and approved on December 11, 2013.

The results of the inspection indicate the facility is currently configured as required by the current PTI and appears to be in compliance with PTI 193-07 and the Air Pollution Control Rules. Engine 2 has been demonstrated to meet the Rule 285(g) exemption, but just barely. The Jordan Development Company has been notified that AQD recommends they apply for a PTI pursuant to R 336.1201. Small changes in operating conditions in the future could result in a higher heat input that exceed 10 MMBtu. Permitting Engine 2 would prevent this incidence of non-compliance, potentially resulting in a Violation Notice.

NAME  DATE 3-2-17 SUPERVISOR 