

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

N611668037

FACILITY: JORDAN DEVELOPMENT COMPANY, L.L.C. - PIGEON RIVER		SRN / ID: N6116
LOCATION: NW NE SEC 22 T31N R1W, CHARLTON TWP		DISTRICT: Cadillac
CITY: CHARLTON TWP		COUNTY: OTSEGO
CONTACT: Kimberly Weber ,		ACTIVITY DATE: 11/29/2022
STAFF: Jodi Lindgren	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Inspection Report as part of the FY23 FCE		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

On Friday November 22, 2022, Jodi Lindgren of the Department of Environmental, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted an unannounced field inspection of Jordan Development Company, LLC (Jordan) – Pigeon River CPF (N6116) located at 2902 Sawdust Pile Road in section 22, T31N-R1W of Charlton Township, Otsego County, Johannesburg, Michigan, 49751. The facility was unmanned at the time of inspection.

The Pigeon River CPF is an opt-out facility with PTI 674-96A issued on December 3, 2007. The facility consists of a tank battery with one 400-barrel brine tanks and a compressor building which houses a compressor, compressor engine, engine catalytic converter, glycol dehydrator (dehy), and dehy flash tank.

SCHEDULED INSPECTION

A. EUDEHY – Glycol dehydration system (dehy) processing natural gas from the Antrim zone. The dehy may be exempt from R 336.1201(1) permitting requirements if the requirements of exemption

R 336.1288(2)(b)(ii) continue to be met by processing only Antrim natural gas. The dehy is subject to 40 CFR Part 63, Subpart HH (NESHAP HH). Records for emissions and fuel usage of the dehy were available to demonstrate compliance with NESHAP HH.

1. Emission Limits – There are no emission limits established in PTI 674-96A associated with this emission unit; therefore, this section is not applicable.

2. Material Limits – There are no material limits established in PTI 674-96A associated with this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions – The dehy has been reported to meet an exemption (40 CFR 63.764(e)(1)(i)) from NESHAP HH with documentation of an actual annual average flow rate of natural gas less than 85,000 cubic meters per day or 3 MMCF/day. Records provided by Jordan indicate an actual annual average flow rate of 5,720 cubic meters per day or 0.202 MMCF/day (reported as 202 MCF/day).

4. Design/Equipment Parameters – PTI 674-96A requires the dehy to be equipped with a flash tank that is maintained and operated in a satisfactory manner. A functioning flash tank was observed during the facility inspection. Records from a third-party contractor was provided that demonstrates regular maintenance and operational assessments.

5. Testing/Sampling – There are no testing or sampling requirements associated with this emission unit; therefore, this section is not applicable.

6. Monitoring – PTI 674-96A imposes monitoring and recordkeeping requirements to document actual annual average flow rate of natural gas to satisfy the NESHAP HH exemption criteria in 40 CFR 63.764(e)(1)(i). Jordan provided documentation to satisfy this exemption.

7. Recordkeeping/Reporting – Recordkeeping and reporting requirements pursuant PTI 674-96A were provided to AQD staff upon request.

8. Stack/Vent Restrictions – PTI 674-96A requires the dehy stack to be a minimum height above ground level of 20 feet. The dehy exhaust stack appeared to meet these requirements during the inspection.

9. Other Requirements – There are no other requirements associated with this emission unit; therefore, this section is not applicable.

B. EUGCS-882 – One CAT G398 TA engine equipped with a catalytic converter and air/fuel ratio controller (AFRC). Records provided by Jordan and their third-party contractor indicate the engine serial number is 73B138 with a unit number of 190173 and skid number of GCS-882. An engine nameplate could not be located to verify the serial number or record the rebuild date. However, the unit number and skid were verified to match Jordan’s records. At the time of the inspection, the engine was running with an RPM of 908, engine oil temperature of 190°F, engine oil pressure of 46 psi, coolant system temperature of 180°F, a compressor oil temperature of 190°F, and a compressor oil pressure of 52 psi. This was consistent with the historical records kept on site which indicated on September 22, 2022, EUGCS-882 was running with an RPM of 933, engine oil temperature of 190°F, engine oil pressure of 45 psi, coolant system temperature of 178°F, a compressor oil temperature of 189°F, and a compressor oil pressure of 53 psi.

1. Emission Limits – PTI 674-96A established a NOx limit of 14.1 tons per year (tpy) and a CO limit of 11.6 tpy calculated at the end of each month using a 12-month rolling time period. Records provided by Jordan indicate 2.11 tpy of NOx emissions and 3.35 tpy CO emissions calculated for a 12-month rolling time period of October 2021 to September 2022. These records indicate compliance with the emission limits established in PTI 674-96A.

2. Material Limits – There are no material limits associated with this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions – PTI 674-96A requires an AQD approve preventative maintenance/malfunction abatement plan (PM/MAP). The PM/MAP was approved by AQD on February 29, 2008. The PTI prohibits the operation of EUGCS-882 for more than 200 hours without a control device consistent with the AQD approved PM/MAP. The records provided by Jordan indicate that the approved control was run 100% time during the time period of October 2021 to September 2022. These records indicate compliance with the process and operational restrictions established in PTI 674-96A.

4. Design/Equipment Parameters – PTI 674-96A prohibits the operation of EUGCS-882 without a control device installed, maintained, and operated in accordance with manufacturer’s recommendations and AQD approved PM/MAP. Records of all maintenance and operational

testing completed by Jordan's third-party contractor were provided. Records indicate the third-party contractor completed emission testing and operational observations on October 18, 2021, February 1, 2022, May 20, 2022, and September 7, 2022. The third-party contractor reported the emission tests and operational observations indicated compliance with the permit and PM/MAP equipment parameters.

5. Testing/Sampling – PTI 674-96A dictates that the AQD District Supervisor may request testing NOx and CO emission verification. No testing has been requested by the AQD Supervisor during the time constraints of this compliance evaluation.

6. Monitoring – PTI 674-96A imposes monitoring and recordkeeping to document natural gas usage for EUGCS-882 on a continuous basis. Jordan provided AQD staff with fuel usage logs for EUGCS-882 which indicated the greatest monthly fuel usage was 1.48 MMCF in July 2022 and the total usage was 16.426 MMCF for a 12-month rolling time period of October 2021 to September 2022. The provided records indicate compliance with the permitted monitoring conditions.

7. Recordkeeping/Reporting/notification – PTI 674-96A establishes recordkeeping for all emissions calculations, natural gas usage, and logs of all monitoring and maintenance activities for EUGCS-882. Jordan provided these records in a timely manner.

8. Stack/Vent Restrictions – PTI 667-69A a stack with a maximum diameter of 12 inches and a minimum height above ground level of 27 feet. The engine exhaust stack appeared to meet these requirements during the inspection.

9. Other Requirements – There are no other requirements associated with this emission unit; therefore, this section is not applicable.

NAME 

DATE 11-14-23

SUPERVISOR 