

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

N781762760

<b>FACILITY:</b> JORDAN DEVELOPMENT COMPANY, L.L.C.- MILTON BRADLEY		<b>SRN / ID:</b> N7817
<b>LOCATION:</b> 4600 CAIRN HWY, KEWADIN		<b>DISTRICT:</b> Cadillac
<b>CITY:</b> KEWADIN		<b>COUNTY:</b> ANTRIM
<b>CONTACT:</b>		<b>ACTIVITY DATE:</b> 04/28/2022
<b>STAFF:</b> Sharon LeBlanc	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> FY 2022 Onsite site inspection. Note that data review will be conducted and reported separately. sgl		
<b>RESOLVED COMPLAINTS:</b>		

On April 28, 2022, AQD District Staff conducted a site visit of the Jordan Development Company, LLC Milton Bradley Central CPF (N7817), located at 4600 Cairn Highway, in the SW SE NE Section 26, T30N-R9W, Milton Township Antrim County, Kewadin, Michigan. The purpose of the site visit was to confirm equipment onsite with respect to Permit to Install (PTI) No. 193-07 Records review was/will be conducted and documented in separate reporting.

The referenced site was previously inspected on February 16, 2017. No compliance issues were identified as part of the 2017 compliance evaluation.

#### FACILITY

The referenced facility is a CPF operated by the Jordan Development Company LLC and is located at 4600 Cairn Highway, Kewadin, Michigan. The Facility is marked on Cairn Highway by a green "house number" sign, on the south side of a barn. The drive curves around the back side of the building, as well as the property owner's residence then back to a wooded area on the approximately 80 acre parcel where the compressor station is located. The drive is in good condition, but the signage for the compressor station is located back at the Facility, not near the road. The compressor station is not visible from the road. Also because there is a residence, there is no gate at the drive entrance, and speed should be kept low.

A review of readily available aerials confirmed that the site was constructed sometime after August 2006. The Facility reports installation of EUDEHY and EUENGINE1 on June 13, 2007. EUENGINE2 was reported to have been installed on December 28, 2027.

MACES compliance activity reports for the site indicate that since the PTI issuance on June 27, 2007, that the Facility has submitted at least three notifications of the intent to install additional RICE onsite to act as boosters. These are summarized later in this report.

At the time of the site inspection weather conditions consisted of partly cloudy skies, temperatures of 28 degrees F, with winds of less than 5 mph. No visible plumes. ArchRock staff were onsite at the time of the site inspection conducting maintenance activities on EUENGINE1. The engine was not operating at that time.

The Facility reports annual emissions as part of the Michigan Air Emissions Reporting Program (MAERS).

#### REGULATORY

**Permitting** - PTIs issued for the Facility include the following:

PTI	Issued	Voided	Issued to
193-07	June 25, 2007	NA	Jordan Development Company, LLC

**The referenced permit was limited to special conditions for EUENGINE1.**

**Federal Regulations - The referenced facility does not process or store petroleum liquids, nor store them onsite and is therefore appears to not be subject to 40 CFR Part 60 (New Source Performance Standards AKA NSPS) Subparts;**

- K, Ka or Kb (Storage vessels for Petroleum Liquids);
- KKK (Equipment Leaks of VOC from onshore NG Processing Plants);
- VV (Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry);

**With regards to the existing engine it appears that based on the manufacture date for both engines (prior to January 1, 2008) that the engine would not be subject to NSPS Subparts IIII for Compression Ignition (CI) RICE.**

**Subpart OOOO would apply to onshore affected facilities that are constructed, modified or reconstructed after August 23, 2011. Based on available information it appears that the referenced subpart is not applicable at this time but that future changes may be subject to the referenced subpart.**

**With respect to 40 CFR Part 63 (Maximum Achievable Control Technology Standards A.K.A. MACT) the following Subparts may apply:**

- Subpart HH (HAPS from Oil and NG Production Facilities)
- Subpart ZZZZ (Reciprocating Internal Combustion Engine aka RICE)

**With respect to Subpart HH, the affected unit is believed to be the dehy unit. However, the facility is not subject to the subpart if it's average throughput is less than 85K cubic meters/day (3 MMscf/day) or average benzene emissions are less than 0.9 Mg/yr (approximately 1 ton/yr). A compliance determination has not been made with respect to this subpart, and at the time of report preparation AQD does not have authority to enforce the subpart.**

**With respect to Subpart ZZZZ, the company at the time of report preparation has provided no information indicating that the existing RICE would not be subject to the referenced subpart. A compliance determination has not been made with respect to this subpart, and at the time of report preparation AQD has been delegated authority to implement and enforce the subpart. However, at this time compliance determinations for Federal requirements under Subpart ZZZZ for Area Sources have not been made.**

## **EQUIPMENT**

Equipment associated with the site at the time of April 28, 2022, site inspection included the following:

EQUIPMENT	INSTALLATION DATE	193-07	Comment
Two 400 bbl Brine ASTs	unk	Exempt	With lined secondary containment
CAT 399 TA, 830 Hp, 16 cylinder with Catalyst and AFR	6/13/2007	EUENGINE1	Unit XX20650 307507 SN 49C09604
CAT 3516 LE, 1400 Hp	12/28/2007	Exempt	EUENGINE2, CM255 Note this engine has been shown to just barely meet <10 MMBTU/Hr heat input for R285(g) exemption.
Dehydrator with reboiler	6/13/2007	EUDEHY	
Iron Sponge	unk	No	To remove H2S to levels suitable for sale

Note that a review of previous MACES reports indicates that written notification of the intent to install supplemental RICE onsite have been submitted for the Facility. At the time of the June 18, 2009, site inspection the following engine notifications had been received:

- September 12, 2007, installation of CAT 3304 HCNA as booster compressor
- November 19, 2007, replacement of CAT 3304 with CAT 3516LE, 1400 Hp, and
- April 6, 2009, installation of CAT 3408 TA booster compressor.

The Facility reported that all three engines would be exempt under R285(g).

District Staff at the time of the June 18, 2009, noted that only two engines were present onsite. It appears that the third engine relocation onsite had not been completed and the district would be notified upon completion.

No operations daily log sheet was found onsite for the EUs. Operational parameters noted at the time of the April 28, 2022, site inspection included the following:

EU	RPMs	Engine Oil Pressure	Oil Temp
EUENGINE1	--	--	--
EUENGINE2	1231	70.7 psi	181

Note that EUENGINE1 was being worked on by ArchRock Staff at the time of the April 28, 2022, site inspection. From older ArchRock logsheets, it appears that EUENGINE1 is inspected approximately every 2 weeks, and that the pre and post catalyst temperatures are <100 degrees difference, the higher temperature being the outlet temperature.

Stack restrictions associated with PTI 193-07 include the following:

STACK	Maximum Diameter (inches)	Minimum Height above ground (feet)
SVENGINE1	8	38

\*Compliance with conditions was determined by visual estimations of height based on building heights, and documentation from previous site inspection reports. SVENGINE1 was noted to meet the maximum diameter and minimum height requirements in compliance with the permit.

## SUMMARY

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from the road. Also because there is a residence, there is no gate at the drive entrance, and speed should be kept low.

A review of readily available aerials confirmed that the site was constructed sometime after August 2006. The Facility reports installation of EUDEHY and EUENGINE1 on June 13, 2007. EUENGINE2 was reported to have been installed on December 28, 2027. In addition to the referenced equipment, two 400-BBL brine tanks and one irons sponge are present onsite.

At the time of the site inspection weather conditions consisted of partly cloudy skies, temperatures of 28 degrees F, with winds of less than 5 mph. No visible plumes. ArchRock staff were onsite at the time of the site inspection conducting maintenance activities on EUENGINE1. The engine was not operating at that time.

No compliance issues were identified during the April 28, 2022, site inspection.

NAME \_\_\_\_\_

DATE \_\_\_\_\_

SUPERVISOR \_\_\_\_\_