

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

N721742660

FACILITY: PAXTON RESOURCES INC., Alba CPF Chestonia 27		SRN / ID: N7217
LOCATION: Section 27, CHESTONIA TWP		DISTRICT: Cadillac
CITY: CHESTONIA TWP		COUNTY: ANTRIM
CONTACT:		ACTIVITY DATE: 12/05/2017
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Tuesday, December 5, 2017, Caryn Owens of the DEQ-AQD conducted a scheduled field inspection and records review of Paxton Resources (Paxton) – Alba CPF/Chestonia 27 facility (N7217) located at the Northeast quarter of the Southeast quarter of the Northeast quarter of Section 27 in Chestonia Township, Antrim County, Michigan. More specifically the site is located south of Alba Road, approximately 1.5 miles west of the Alba Road and US-131 (Mackinaw Trail) intersection. The drive into the site is approximately 0.4 miles to the facility. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 227-03. Paxton has opted out of major source applicability by limiting operational and/or production limits potential to emit (PTE) to be below major source thresholds. DEQ was unaccompanied during the field inspection. The site is an area source for National Emission Standards for Hazardous Air Pollutants (NESHAP) from Oil and Natural Gas Production facilities (40 CFR, Part 63, Subpart HH), and NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ). The State of Michigan does not have delegated authority of the area source NESHAPs, and thus these areas were not reviewed by the DEQ at this time.

Evaluation Summary

Based on the activities covered during this field inspection, the facility appears to be in compliance with PTI 227-03. Review of the records for the facility indicates the facility was in compliance with emission limits in accordance with the current PTI. No further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

On-site Inspection:

During the field inspection, the weather conditions were cloudy and snowing, with gusting winds from the southwest about 15 miles per hour, and approximately 35 degrees Fahrenheit. The facility consisted of: one main building that contained separators, a glycol dehydrator system, and an engine; and an iron sponge located on the east side of the building. The compressor engine was a Caterpillar 398HCTA rich burn engine, with no control. During the field inspection, the engine was operating at 872 revolutions per minute (RPM), 190 degrees Fahrenheit, and 63 pounds per square inch (psi) of pressure. The engine block had GCS 175 stamped into it, and the daily log sheet had the engine listed as Unit #175. The daily log sheet was up date and properly filled out. The stack on the compressor engine was approximately 30 to 35 feet above ground surface, and contained a muffler. According to the DEQ Geowebface website and the permit application, the natural gas is from the Antrim shale formation.

The facility is claiming the following exemption at the facility:

- glycol dehydrator meets exemption Rule 336.1288(2)(b)(ii).

PTI Compliance Evaluation:

EUCOMPENGINE: A Caterpillar 398TA 4-stroke 610 horse power reciprocating engine.

- Emission Limits:**

The Emission Limit is 64 tons of nitrogen oxides (NOx) per year based on a 12-month rolling time period. Based on records reviewed from November 1, 2016 through October 31, 2017, the highest emissions reported were 40 tons of NOx based on a 12-month rolling time period, and reported within the permitted limits.

- Material Limits:**

There are no applicable Material Limits associated with EUCOMPENGINE.

- Process Operational Restrictions:**

Although the PTI did not address Process/Operational Restrictions, the facility submitted maintenance records and the engine was inspected daily. The engine was shut down while performing general maintenance such as: replacing filters, valves, spark plugs, oxygen sensors, and/or repair leaks. The records did not show maintenance concerns with the engine.

Design/Equipment Parameters:

The engine does not operate with a control device, therefore there are no applicable Design/Equipment Parameters associated with EUCOMPENGINE.

Testing/Sampling:

The facility uses engine specific emission factors to calculate the emissions for NOx. Performance testing has not been completed at this facility.

Monitoring/Recordkeeping:

The facility monitors and records the natural gas usage on a monthly and 12-month rolling time period basis for EUCOMPENGINE. The facility maintains a log of all significant activities at the facility, and keeps the records in a satisfactory manner.

Reporting:

Reporting requirements are not applicable for EUCOMPENGINE.

Stack/Vent Restrictions:

The stack to EUCOMPENGINE is located on the southwest side of the compressor building and is vertically upward. The stack appeared to meet the permitted limits of 25 feet above ground surface.

Other Requirements:

Although the PTI does not address "Other Requirements" for EUCOMPENGINE, the facility is subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (40 CFR, Part 63, Subpart ZZZZ). The State of Michigan does not have delegated authority of the area source NESHAP, and thus compliance with the federal requirements in accordance with the EUENGINE1 was not reviewed by the DEQ at this time.

NAME Caryn Owens

DATE 12/5/17

SUPERVISOR SN