

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

N782542294

FACILITY: OMIMEX ENERGY -- Victory 32 Facility		SRN / ID: N7825
LOCATION: 3370 W. Fisher Road, LUDINGTON		DISTRICT: Cadillac
CITY: LUDINGTON		COUNTY: MASON
CONTACT:		ACTIVITY DATE: 10/17/2017
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Tuesday, October 17, 2017, Caryn Owens of the DEQ-AQD conducted a scheduled field inspection and records review of Omimex Energy (Omimex) – Victory 32 facility (N7825) located on northern portion of West Fisher Road, approximately 0.2 miles west of North Victory Corner Road in Ludington, Mason County, Michigan. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 208-07. Omimex 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 208-07. 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 clear, with gusting winds from the southwest about 10 miles per hour, and approximately 60 degrees Fahrenheit. The facility consisted of: two process heaters on the northern portion of the site; one small amine unit on the northern portion of the site; one glycol dehydrator on the northern portion of the site; a tank battery area on the southeastern portion of the site that contained an approximately 210 barrel (bbl) above ground storage tank and one 18,000 gallon natural gas liquid (NGL) horizontal bullet storage tank; a vapor recovery unit (VRU) building on the eastern portion of the site; a flare on the northeastern portion of the site; and a compressor building with one engine on the northwestern portion of the site.

The compressor engine was a 400 horsepower (hp) Caterpillar G3408TA rich burn engine, with no control and was not operating during the inspection. The stack on the compressor engine was approximately 30 to 35 feet above ground surface. A small amine plant was between the compressor building and glycol dehydrator which is used to sweeten the natural gas. The glycol dehydrator and above ground storage tanks are connected to the VRU. A flare, approximately 40 feet above ground surface, was located on the northeastern portion of the site. I could hear the pilot gas flowing through the flare, but a visible flame was not observed, only a heat shimmer was observed at the top of the flare.

The facility is claiming the following exemptions at the facility:

- glycol dehydrator meets exemption Rule 336.1288(2)(b),
- the process heaters meet exemption Rule 336.1282(2)(b)(i),
- the flare meets exemption Rule 336.1282(g),
- the bullet tank and 210 bbl tank meet exemption Rule 336.1284(2)(f).

PTI Compliance Evaluation:

EUENGINE1: Natural Gas Fired Reciprocating Compressor Engine. During the inspection EUENGINE1 was not operating, but was a 400 hp W Caterpillar G3408TA rich burn engine, identified on the daily field sheets as Serial

Number ENG-6NB02265 and Unit #202202-018.

• **Emission Limits:**

The Emission Limit is 87.6 tons of nitrogen oxides (NOx) per year based on a 12-month rolling time period. Based on records reviewed from October 1, 2016 through September 30, 2017, the highest emissions reported were 29.9 tons of NOx based on a 12-month rolling time period, and reported within the permitted limits.

• **Material Limits:**

Natural gas for EUENGINE1 shall not exceed 48,040,050 cubic feet per year. Based on records reviewed from October 1, 2016 through September 30, 2017, the highest natural gas usage was 10,701,000 cubic feet per year and is within the permitted limits

• **Process Operational Restrictions:**

The facility submitted a Malfunction Abatement Plan (MAP) on October 3, 2010. Based on review of the MAP and maintenance records, the engine was inspected daily when operating. 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, and Omimex appears to be following the MAP for the facility. Additionally, according to Omimex, the engine at the facility has been shut-in since March 2017 while awaiting a new contract.

• **Design/Equipment Parameters:**

The engine does not operate with a control device, therefore there are no applicable Design/Equipment Parameters associated with EUENGINE1.

• **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 EUENGINE1. The facility maintains a log of all significant activities at the facility. As previously stated, the engine does not use a control device for operation.

• **Reporting:**

Reporting requirements are not applicable for EUENGINE1.

• **Stack/Vent Restrictions:**

The stack to EUENGINE1 is located on the north side of the compressor building and is vertically upward. The stack appeared to meet the permitted limits of 30.5 feet above ground surface.

• **Other Requirements:**

Although the PTI does not address "Other Requirements" for EUENGINE1, 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.

FGFACILITY: All process equipment at the facility including equipment covered by other permits, grandfathered equipment, and exempt equipment.

• **Emission Limits:**

The Emission Limit for FGFACILITY is 89.4 tons of NOx per year based on a 12-month rolling average. Based on records from October 1, 2016 through September 30, 2017, the highest emissions reported were 30.9 tons per 12-month rolling time period, and are reported within the permitted limits.

• **Materials/Fuels:**

Except for the onsite flare, the facility shall only burn sweet gas at the facility. According to Omimex, only sweet natural gas is burned at the site.

• **Process/Operational Parameters:**

The facility continuously burns a sweet natural gas pilot in the flare while processing natural gas, which was heard during the inspection. Only a heat shimmer was observed at the top of the flare, and no visible flame. No visible emissions were observed during the inspection.

Design/Equipment Parameters:

There are no Design/Equipment Parameters for FGFACILITY.

Testing:

There are no Testing requirements for FGFACILITY.

Monitoring/Recordkeeping:

The facility records monthly and 12-month rolling time period calculations for NOx. The 12-month rolling time period emissions are discussed above, under emission limits. The natural gas usage, and monthly and 12-month rolling time period emissions records are attached.

Reporting:

The reporting requirements were combined with the Recordkeeping requirements in PTI 208-07. Although not mentioned in PTI 208-07, the facility is required to report to Michigan's Air Emissions Reporting System (MAERS) on an annual basis, and the facility passed the previous year's MAERS review.

Stack/Vent Restrictions:

No Stack/Vent Restrictions were applicable for FGFACILITY.

Other Requirements:

No Other Requirements were applicable for FGFACILITY.

NAME Chym Owens

DATE 10/17/17

SUPERVISOR SN