

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

N709039880

FACILITY: RIVERSIDE ENERGY MICHIGAN, LLC - JORDAN 9		SRN / ID: N7090
LOCATION: SECTION 9, EAST JORDAN		DISTRICT: Cadillac
CITY: EAST JORDAN		COUNTY: ANTRIM
CONTACT: Natalie Schrader , Environmental Technician		ACTIVITY DATE: 04/12/2017
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of this opt out source.		
RESOLVED COMPLAINTS:		

Inspected this source per Permit to Install 9-10. No odors or visible emissions were noted on site during the inspection. An inventory of pertinent equipment is as follows:

Engine 1, V-16 CAT 3516 LEW Engine with catalytic controls, Unit 1057  
One small glycol dehy

Following are the findings of the inspection per permit Special Condition:

EUDEHY

I. EMISSION LIMITS -NA

II. MATERIAL LIMITS -NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart HH. Pursuant to 40 CFR 63.764, as long as the facility processes less than 85,000 cubic meters per day based on an annual average, they are considered a small dehy unit and are exempt from the general requirements of this subpart.

IV. DESIGN/EQUIPMENT PARAMETERS -NA

V. TESTING/SAMPLING -NA

VI. MONITORING/RECORDKEEPING

1. Natural gas flow rate to the dehy is limited to 85,000 cu. m. per day based on an annual average. Natural gas flow rate to the dehy is 504 cu. meters per day based on an annual average. A sample of the records supporting this is attached.

VIII. STACK/VENT RESTRICTIONS -NA

IX. OTHER REQUIREMENTS -NA

EUENGINE1

1. NOx emissions from EUENGINE1 are not to exceed 60 tpy based on 12-month rolling time period as determined at the end of each calendar month. Records indicate emissions from this engine are 12.1 tpy based on 12-month rolling time period as determined at the end of each calendar month as of March of 2017.
2. CO emissions from EUENGINE1 are not to exceed 30 tpy based on 12-month rolling time period as determined at the end of each calendar month. Records indicate emissions from this engine are 11.5 tpy based on 12-month rolling time period as determined at the end of each calendar month as of March of 2017.

II. MATERIAL LIMITS

1. Only sweet natural gas is allowed as fuel to the engines. Wells feeding this facility pump natural gas only from what is considered "sweet" formations. No request to verify this has been made in the last 12 months and is not recommended at this time.

### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The engine must have an approved MAP. This MAP was received by the AQD in March of 2010 and was approved in July of 2010. When this MAP was approved, there was no catalyst on this engine. A request for an updated MAP was sent to the facility on 5/19/17. Monitoring in the current MAP includes temperature differential across the catalyst, compressor downtime, and compressor operating parameter monitoring. A sample of these records is attached.
2. The permittee shall not operate any engine equipped with an add-on control device for more than 200 hours per engine per year without that control device. This engine is equipped with a catalyst. There are no records in the last 12 months of the engine operating without the control device attached.

### IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any engine that contains an add-on control device unless that device is installed, maintained, and operated in a satisfactory manner. The engine is equipped with a catalyst. Temperature readings indicate a rise across the catalyst bed which is an indicator that it is working.
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for each engine. The engine is so equipped. Records of natural gas usage are being kept.

### V. TESTING/SAMPLING

1. Upon request by the AQD District Supervisor, the permittee shall verify NO<sub>x</sub> and CO emission factors used to calculate emissions from the engine. As of this inspection, no request has been made and none is recommended.
2. Verification of H<sub>2</sub>S and/or sulfur content of the natural gas burned in the engine may be required upon request by the AQD District Supervisor. As of this inspection, no request has been made and none is recommended.

### VI. MONITORING/RECORDKEEPING

1. The permittee shall complete all required calculations by the last day of the calendar month. Records provided by the facility indicate these are being performed in a timely manner.
2. The permittee shall monitor the natural gas usage by the engine on a continuous basis. Records of natural gas usage are being kept.
3. The permittee shall maintain a log of all maintenance activities conducted. Records provided by the facility indicate this is being performed.
4. The permittee shall keep, for any engine equipped with an add-on control device, monthly and 12-month rolling time period records of the hours that the engine is operated without the control device. This engine is equipped with a catalyst. There are no records in the last 12 months of the engine operating without the control device attached.
5. The permittee shall keep monthly fuel use records for the engine. Each engine is equipped to monitor natural gas flow rate. Records of natural gas usage are being kept.

- 6. The permittee shall keep monthly and 12-month rolling time period NO<sub>x</sub> emission calculation records for the engine. These records are being kept and demonstrate compliance.
- 7. The permittee shall keep monthly and 12-month rolling time period CO emission calculation records for the engine. These records are being kept and demonstrate compliance.

**VII. REPORTING**

- 1. If any engine included in FGENGINES is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall notify the AQD District Supervisor of such change-out. The original permitted engine has not been replaced.

**VIII. STACK/VENT RESTRICTIONS**

- 1. Stack parameters for each engine appear correct and do not appear to have been recently modified.

**IX. OTHER REQUIREMENTS**

- 1. The natural gas monitoring device required shall be installed within 120 days of issuance of this permit. This has been performed.
- 2. The minimum stack height above ground level shall apply within 120 days of issuance of this permit. This has been performed.

At the time of the inspection, this facility was in compliance with their air permitting.

NAME 

DATE 9/19/17

SUPERVISOR 