

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

N709439864

| | | |
|---|--------------------------------------|----------------------------------|
| FACILITY: Riverside Energy Michigan, LLC - CUSTER 33 CPF | | SRN / ID: N7094 |
| LOCATION: SECTION 33, CUSTER TWP | | DISTRICT: Cadillac |
| CITY: CUSTER TWP | | COUNTY: ANTRIM |
| CONTACT: Natalie Schrader , Technical Assistant | | 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 312-08A. No odors or visible emissions were noted on site during the inspection. An inventory of pertinent equipment is as follows:

Engine 1, V-16 Engine with no control, Skid 1175, G3516TA, Ser. 4EK00417
 Engine 2, V-16 Engine with no control, Skid 1036, G3516TA, Ser. 4EK01028
 One small glycol dehy
 One 400 bbl AST (exempt per Rule 284(2)(b))
 In shack H2S, appears operational

Location:
 44.86238
 85.17022

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

FGENGINES

I. EMISSION LIMITS

1. NOx emissions from Engine 1 are limited to 60 tpy based on a 12 month rolling time period. Records provided by the facility indicate emissions from this engine were 19.55 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 Engine 1 are limited to 30 tpy based on a 12 month rolling time period. Records provided by the facility indicate emissions from this engine were 17.59 tpy based on 12-month rolling time period as determined at the end of each calendar month as of March of 2017.
3. NOx emissions from Engine 2 are limited to 27 tpy based on a 12 month rolling time period. Records provided by the facility indicate emissions from this engine were 17.71 tpy based on 12-month rolling time period as determined at the end of each calendar month as of March of 2017.
4. CO emissions from Engine 2 are limited to 23 tpy based on a 12 month rolling time period. Records provided by the facility indicate emissions from this engine were 16.83 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.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The engines must have an approved MAP. This MAP was received by the AQD on 11/9/2015 and approved on 5/18/2017. Monitoring in the MAP includes pressure drop across the catalyst, 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. Neither engine is equipped with a control

device.

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. Neither engine is equipped with a control device.
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. Each engine is equipped to monitor natural gas flow rate. Records of natural gas usage are attached.

V. TESTING/SAMPLING

1. Upon request by the AQD District Supervisor, the permittee shall verify NO_x and CO emission factors used to calculate emissions from one or more engine(s). 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. All emissions calculations are completed in a timely manner.
2. The permittee shall monitor and record, the natural gas usage for FGENGINES on a continuous basis. Each engine is equipped to monitor natural gas flow rate. Records of natural gas usage are attached.
3. The permittee shall maintain a log of all maintenance activities conducted according to the PM / MAP. Monitoring in the MAP includes pressure drop across the catalyst, temperature differential across the catalyst, compressor downtime, and compressor operating parameter monitoring. A sample of these records is attached.
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. Neither engine is equipped with a control device.
5. The permittee shall keep, monthly fuel use records for each engine. Each engine is equipped to monitor natural gas flow rate. Records of natural gas usage are attached.
6. The permittee shall keep, monthly and 12-month rolling time period NO_x emission calculation records for each 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 each 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. No engines at this facility have been changed out since permit issuance in October of 2015.

VIII. STACK/VENT RESTRICTIONS

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

IX. OTHER REQUIREMENTS

NA

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

NAME 

DATE 5/18/17

SUPERVISOR SN