

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

N605641018

FACILITY: RIVERSIDE - ELMIRA 34 CPF		SRN / ID: N6056
LOCATION: NW4 SE4 SEC 34 ELMIRA TWP, ELMIRA		DISTRICT: Cadillac
CITY: ELMIRA		COUNTY: OTSEGO
CONTACT:		ACTIVITY DATE: 08/03/2017
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: scheduled site inspection of synthetic minor facility in Otsego County.sgl		
RESOLVED COMPLAINTS:		

On August 3, 2017, AQD District Staff performed a scheduled site inspection at the Riverside Energy Partners LLC (Riverside), Elmira 34 CPF, located at Elmira Township, Gaylord, Gaylord County, Michigan. SRN No. N6056. The facility is permitted under Permit to Install No. 607-96 issued on January 8, 1997. The purpose of the site inspection was to confirm operation of the facility in compliance with the referenced permit. The most recent compliance inspection of record was September 25, 2012.

Mr. Brad Szymachack of Riverside met Staff onsite and answered questions with respect to equipment and facility operations. Ms. Natalie Schrader of Riverside provided records for review upon request and in a timely manner.

FACILITY

The referenced facility is located in the NW1/4 of the SE1/4 of Section 34, Elmira Township, Elmira, Michigan. Access to the facility is located approximately 1/2-mile west of the intersection of Alba Road and M-32. The access road is on the north side of the road and is gated and locked. Adjacent properties consist of predominantly undeveloped acreage, residential and some agricultural property.

The referenced facility was permitted by O.I.L. Energy Corp and in February 2017, was acquired by Riverside. The referenced facility is compressor station, for wells associated with both the Elmira #34 and Elmira #27 fields. Both fields are reported to be Antrim fields.

Activities at the facility include chemical removal of hydrogen sulfide from the incoming gas stream via an iron sponge and separation of H₂O from the stream using a dehydrator prior to compressing the gas for the pipeline. A review of previous site inspections appears to indicate that the use of the iron sponge to sweeten the incoming gas stream was not considered "processing" of the natural gas. Discussions with the Permittee indicate that the iron sponge represents pretreatment of the gas prior to processing.

No crude or condensate is generated onsite. Water separated from the gas stream is containerized in a brine tank onsite before disposal.

REGULATORY APPLICABILITY

Though not identified in the permit for the facility, the facility as an area source may be subject to federal Regulation. Subparts frequently associated with oil and gas facilities are identified below. Note however, that compliance with these subparts has not been determined as part of this inspection.

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);

In addition, the existing engine(s) have an install date of 12/01/1989, which would make it not subject to NSPS Subparts IIII and JJJJ for Compression Ignition (CI) RICE and Spark Ignition (SI) RICE, respectively.

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) the following Subparts may apply:

- Subpart HH (HAPS from Oil and NG Production Facilities)
- Subpart ZZZZ (RICE)

With respect to Subpart HH, the affected unit is believed to be the dehy unit. However, the facility reports that it is not subject to the referenced subpart due to processing of only Antrim gas (no benzene) at the facility. The facility also reports that they keep records of the annual flow rate and that they are well under limits. 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, Initial Notification for Subpart ZZZZ by O.I.L. Energy Corp was received by the District Office on February 16, 2011. The referenced document identified the facility as an area source of HAPS, and a compliance date of October 19, 2013. The document identified the RICE for the facility as a CAT 3512TALE 810 Hp. A determination of compliance under the referenced subpart has not been made as part of this compliance determination.

EQUIPMENT

Three buildings and a brine tank are present onsite, though active equipment is limited to the larger, central building. Equipment onsite includes:

- One Tri-ethylene Glycol (TEG) dehydrator
- One 200 –HP Electric compressor (non-operational) (SE outbuilding)
- One NG fired Generator (Genset) (non-operational) (western outbuilding)
- One 4 stage, Aerial Corporation, NG compressor with a caterpillar RICE.

A review of District files indicates that an engine change out was conducted in 2003 and that District Staff determined the activity was exempt from permitting under existing exemptions at that time (Rule 285(2)(a)(vi) and 285(2)(g)). The replacement engine was reported to be a SI , 1200 rpm, Caterpillar 3512 Low Emission (LE) compressor engine (810 HP CAT 3512TALE).

It should be noted that at the time of permitting, the applicant indicated that they would install a catalytic converter to reduce NOx emissions to below 90 tpy to avoid public comment during permitting. File records appear to indicate that no catalytic converter has been associated with the site and none was noted at the time of the inspection. No requirement for a pollution control device is specified within the permit.

COMPLIANCE

Conditions of Permit No. 607-96 do not identify site specific equipment. Special conditions associated with the permit are primarily limited to emission limits for the site, record keeping and monitoring requirements.

The most recent site inspection was conducted on September 25, 2012. The facility was found to be in compliance with their permit at that time. No complaints are of record for the facility since the last site inspection.

Process and operations –

At the time of the site inspection, District Staff noted that the site was well maintained; no staining or visible emissions were noted. Doors to the three buildings onsite were noted to be closed, and the compressor was in operation.

Record Keeping –

Recordkeeping under permit No. 607-96 includes the following requirements:

- A log of all significant maintenance activities conducted and all repairs made to equipment (SC # 19)
- Monthly Fuel Consumption in MMCF (SC # 16)
- Glycol circulated thru the dehydrator in gpm (SC # 16)

Manual documentation of various readouts at the facility is conducted daily, and is submitted to the corporate office at regular intervals. The above referenced information was provided in a timely manner in compliance with permit conditions. Copies may be found in district files.

Emissions-

Special Conditions (SC) #s 13 and 14 of Permit No. 607-96 specify emission limits in tons per year based on 12-month rolling time period with respect to the facility. Compliance with the referenced emission limits per the SCs are to be determined using emission factors outlined in Appendix A of the referenced permit. A review of District Files indicates that the previous owner maintained the Appendix A spreadsheet to show compliance. Records provided by Riverside as part of the August 3, 2017 inspection/compliance evaluation reported emissions well below the permit conditions and are summarized below.

	CO	VOC	NOX	Single HAP	Total HAPs
Emission Limit	89	89	89	9	22.5
Emissions Engine 1	6.31	1.58	7.88	-	1.58
Emissions Glycol Dehydrator	0.18	0.01	0.73	-	0.01
Emissions FGFACILITY	6.49	1.60	8.61	-	1.60

SC #15 requires that the 12-month rolling total be rolled monthly, but allows for use of stack test results for any of the referenced parameters to estimate emissions with approval of the AQD. Stack tests are to be performed in accordance with SC # 23. A review of district files did not identify stack testing activities or correspondence referencing stack testing activities for the process equipment onsite. Based on the file review the referenced requirements are not applicable at this time.

Based on the recent acquisition of the facility by Riverside, 2 years' worth of all operating and emissions data may not be available for review (SC # 17). Records provided upon request were sufficient to show the intent of the Permittee to maintain records in compliance with the SC.

Testing-

SC # 23 specifies that any stack testing performed to verify CO, VOC, NOx or HAP emission rates for any equipment at an oil-gas facility must submit prior notification, and a test plan, and be approved by the AQD prior to testing. No documentation regarding testing (either a request for testing, or testing results) was found in District files. The referenced SC is not applicable at this time.

Reporting –

Under SC # 18 the facility is required to report actual emission annually to AQD. The facilities annual reporting thru MAERs meets this requirement.

Other-

SC # 19 requires the owner or operator to conduct all necessary maintenance and make all necessary attempts to keep all components of the process equipment in operating condition at all times. Based on records provided, observations made at the time of the inspection, and the reported automatic call-in system that sends notification should the compressor go down, it appears that the facility is in compliance with the permit condition.

SC # 24 requires that the facility process only sweet gas as defined in Rule 119. As previously indicated the facility treats incoming gas with an iron sponge to sweeten the gas prior to processing. This has historically been identified as being compliant with the referenced conditions. Riverside staff indicated that the facility is monitored at least monthly to confirm that the iron sponge is still treating the gas stream. Copies of the most recent field records were provided for review.

Permit SC # 20 is for facilities with crude oil or condensate storage tanks, which is not applicable for this facility.

SC # 20 references requirements regarding malfunction of an air pollution control device. The existing equipment onsite are not associated with pollution control devices, and the SC is not applicable for the facility at this time.

SC # 22 requires that the owner or operator determine if their facility is subject to Subpart KKK, and if so conduct the required monitoring and operating requirements. The facility has been determined to not be subject to the referenced subpart, and historical records document this determination by the owner operator.

Summary-

On August 3, 2017, AQD District Staff performed a scheduled site inspection at the Riverside Energy Partners LLC (Riverside), Elmira 34 CPF, located at Elmira Township, Gaylord, Gaylord County, Michigan. SRN No. N6056. The facility is permitted under Permit to Install No. 607-96 issued on January 8, 1997. The purpose of the site inspection was to confirm operation of the facility in compliance with the referenced permit. The most recent compliance inspection of record was September 25, 2012.

Mr. Brad Szymachack of Riverside met Staff onsite and answered questions with respect to equipment and facility operations. Ms. Natalie Schrader of Riverside provided records for review upon request and in a timely manner.

The facility was found to be in general compliance with permit conditions at the time of the inspection.

NAME Sharon C. Blawie

DATE 8/3/17

SUPERVISOR SN