

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

B719735214

FACILITY: ANR -- Rapid River Compressor Station		SRN / ID: B7197
LOCATION: 2170 Rabourn Rd. NE, KALKASKA		DISTRICT: Cadillac
CITY: KALKASKA		COUNTY: KALKASKA
CONTACT: Brad Stermer, Sr. Environmental Specialist		ACTIVITY DATE: 06/23/2016
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: 2016 FCE, site inspection and records review.		
RESOLVED COMPLAINTS:		

The ANR Storage Company – Rapid River Compressor Station (ANR Rapid River) is a natural gas storage facility. There are two distinct operating seasons for the ANR Rapid River facility, Injection (usually April through October) and withdrawal (usually November through March). Different equipment is in operation at the facility during each season. As a result, the FCE for this facility is being conducted in two stages to observe representative operation under both operating conditions. A PCE during the withdrawal season and covering EURRGLYDEH and FGRRGEN was conducted on 2/17/2016. This PCE and completion of the FCE was conducted during the injection season and covers FGRRCOMP and the PTI exempt boiler. On 6/23/2016 I conducted the site inspection portion of the injection season PCE. From off-site I did not observe any visible emissions or detect any odors. The weather was partly cloudy with temperatures around 63 and light south east winds.

I met with Mr. Jim Gelinis who answered my questions and showed me around the facility following a site specific safety orientation. At the time of the inspection the plant was injecting gas and had begun the injection season on May 25, 2016. This plant operated a limited amount during the withdrawal season so the storage field was not emptied Mr. Gelinis stated they needed to run 90 days (with one compressor) this season.

We discussed the current status of the facility and Mr. Gelinis showed me around focusing on the two compressor engines and a gas fired boiler used for building heat. The compressor engines do not operate during withdrawal season unless storage pressures are too low, they mainly operate during the injection season and at the time of the inspection only EUCOMP-B was operating at 330 rpm producing 3,145 hp at a Torque set point of 90% and calculated Torque of 89%. Engine operations are fully automated according to programming and are locked. Adjustments to the operating parameters cannot be made manually in this operating mode. EUCOMP-A was torn down for a major (6 million dollars) overhaul of the engine and compressors and is not anticipated to operate this season other than for engine break-in.

The boiler is used for building heat and to heat the fuel for the compressor engines. It has been operational on a daily basis this year.

FGRRCOMP

I. Emission Limits

1. NOx 99.2 lbs/hr: Compliance demonstrated by stack testing.

II. Material Use Limits

No material use limits.

III. Process/Operational

1. Compressor engine fuel gas total sulfur content is less 20 grains per 100 cubic feet based on 3/17/2014 certificate of analysis (from 1st PCE) indicating H2S as non-detectable, 0.1 ppm detection limit.

IV Design/Equipment

1. Each compressor engine is demonstrated to have been designed not to emit more than 12 grams of NOx per brake horsepower hour at 100% speed and 100% torque by compliance with the 99.2 lb./hr. emission limit which has been demonstrated. The 99.2 lb./hr. limit is based on the original PTI limit of 12

grams/hp-hr x 3750 hp per engine.

V. Testing

1. NOx emission testing required by 6/15/2015 and every five years thereafter. The last NOx emission test took place on 6/03/2015 and results indicated both engines were in compliance with the 99.2 lb/hr. emission limit for each engine.

VI. Monitoring/Recordkeeping

1. Preventative maintenance records are recorded and logged then transferred to an electronic format. Following the inspection the attached preventative maintenance records were provided by ANR.

VII. Reporting

1., 2., 3., ROP deviation, semiannual and annual reporting. All reports have been submitted in a timely manner and with proper certification. Reports were reviewed as they were received.

4., 5., 6. Stack test protocol and test results from the 6/03/2015 test were provided in a timely manner and were complete. The reports were reviewed at the time they were received.

VIII. Stacks

1., 2. There have been no changes to the compressor engine stacks and they appeared to meet the minimum height and maximum diameter requirements.

Boiler

The ANR Rapid River facility has one natural gas fired boiler that is used to heat the generator and compressor buildings as well as heating the compressor engine fuel. I recorded the following nameplate data from the boiler:

Boiler Mfg.	Cleaver-Brooks
Serial Number	L66975
Model	
Date	5-25-79
Heat Input Rating	2,511,000 Btu

The boiler is PTI exempt but is subject to 40 CFR 63 Subpart DDDDD. The compliance date for this boiler was January 31, 2016. It is an existing small boiler (natural gas only) at a major source and is subject to energy assessment and tune-up work practice standards. The Notification of Compliance Status has been submitted.

Conclusion

As a result of the FCE it appears that the ANR Rapid River facility is currently in compliance with the requirements of MI-ROP-B7197-2012a, the air pollution control rules, 40 CFR 63 Subpart HHH, 40 CFR 63 Subpart ZZZZ, and 40 CFR 63 Subpart DDDDD.

NAME 

DATE 6-29-16

SUPERVISOR 