

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

B719635212

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| FACILITY: ANR Storage Company - Excelsior Compressor Station | | SRN / ID: B7196 |
| LOCATION: 4936 State 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 – Excelsior Compressor Station (ANR Excelsior) is a natural gas storage facility. There are two distinct operating seasons for the ANR Excelsior 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 EUEXGLYDEH and FGEXGEN was conducted on 2/17/2016. This PCE and completion of the FCE was conducted during the injection season and covers FGEXCOMP 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. This facility is remotely located and surrounded by forest. The weather was overcast with temperatures around 60 and light east winds.

I met with Mr. J.R. Gines (incorrectly identified as J.R. Givens in previous PCE) who answered my questions and showed me around the facility. At the time of the inspection the plant was not injecting gas and had not injected any this season. This plant did not operate during the withdrawal season so the reservoir is essentially still full from the last injection season. Due to some settling of the gas in the storage field Mr. Gines stated they could run for 6 days to top it off but likely would not.

We discussed the current status of the facility and Mr. Gines 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 neither were operating. The turbo has been removed from EUEXCOMP-A to replace a failed turbo at another location. The turbo will eventually be returned or replaced. EUEXCOMP-B is functional but was not running since there is currently no need. The boiler is used for building heat and to heat the fuel for the compressor engines. It has been operational on a daily basis during the past year.

FGEXCOMP

I. Emission Limits

1. NOx 99.2 lbs/hr: Compliance has been 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 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 tests took place on 6/14/2014 (EUEXCOMP-B) and 8/19/2014 (EUEXCOMP-A). Results indicated both compressor engines were below the 99.2 lb/hr. 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. The stack test protocol had apparently been sent by ANR but not received by AQD prior to the test. Test results from the 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 Excelsior 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:

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|-------------------|----------------|
| Boiler Mfg. | Cleaver-Brooks |
| Serial Number | L68920 |
| Model | CB 00-60 |
| Date | 4-18-80 |
| 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 Excelsior facility is currently in compliance with the requirements of MI-ROP-B7196-2012a, 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

