

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

B648145814

FACILITY: ANP Pipeline Company - Capac Compressor Station		SRN / ID: B6481
LOCATION: 4876 KETTLEHUT RD., CAPAC		DISTRICT: Southeast Michigan
CITY: CAPAC		COUNTY: SAINT CLAIR
CONTACT: Paul Weinmann , Mechanic		ACTIVITY DATE: 08/28/2018
STAFF: Lauren Magirl	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: On-site inspection		
RESOLVED COMPLAINTS:		

On Tuesday, August 28, 2018, Sebastian Kallumkai and I, Lauren Magirl, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) inspectors, conducted a scheduled inspection at ANR Pipeline Company – Capac Compressor Station (ANR) located at 4876 Kettlehut Road, Capac, Michigan. The purpose of this inspection was to determine the compliance of the facility with the Federal Clean Air Act: Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended; and Michigan Department of Environmental Quality, Air Quality Division rules and Renewable Operating Permit (ROP) No. MI-ROP-B6481-2016.

Pre-Inspection Meeting/ Facility Overview

We arrived at the facility at about 10:00 am and met with Mr. Paul Weinmann, Mechanic. We identified ourselves, provided our credentials and stated the purpose of our inspection.

We went over ANR's operation with Mr. Weinmann and he stated nothing has changed since the last inspection in 2016. ANR withdraws natural gas from the storage field twenty-four hours a day, seven days a week using an electric motor reciprocating compressor to compress the gas. The facility stopped injecting gas into the field circa 2004. The storage field is approximately three miles by seven miles which has the approximate capacity of 32.5 billion cubic feet. Three operators/field staff at the facility during usual work hours. The facility has one glycol dehydration system (EUCP003) that is used to remove moisture and hydrocarbons from the natural gas. The system equipment consists of a flash vessel, heat exchanger and filters, distillation column, and a reboiler/surge tank. The emissions to the atmosphere from the system are destroyed initially by a thermal oxidizer. A condenser is used as a back up to the thermal oxidizer. The glycol dehydration system is defined as an existing small unit constructed prior to August 23, 2011 in 40 CFR 63.1271. ANR has a diesel fueled emergency generator on-site for interruptions in power supply to the facility. The facility reported operating 3,844.6 hours from January 1, 2018 through July 31, 2018.

During the inspection, the glycol dehydration process was not currently operating. Mr. Weinmann stated the process has not been operational for about a month due to a leak in the glycol dehydration system. They are waiting on someone to come fix the leak. He also mentioned that the facility is currently scheduled for closure in 2021. Mr. Weinmann escorted us around the facility for the inspection.

EUCP0003 and EUCP003 – HHH

Emission Limits

The following emissions limits are set forth in MI-ROP-B6481-2016:

- VOC emission limit of 45.5 pounds per day
- 12-month rolling VOC emission limit of 8.3 tons per year
- 12-month rolling benzene emission limit of 1.0 ton per year
- BTEX emission limit to the value calculated using equation in Appendix 7 of the ROP

Mr. Chris Walman, Senior Environmental Specialist, provided the following records from January 2017 through July 2018:

- Daily dehydration system status
- Daily thermal oxidizer stack temp
- Daily condenser stack temp
- Daily thermal oxidizer hours of operation
- Daily condenser hours of operation
- Daily thermal oxidizer throughput in mmscf/day

- Daily condenser throughput in mmscf/day
- Daily VOC emissions in lb/day
- Daily benzene emissions in lb/day

Mr. Walman also provided the leak detection and repair (LDAR) report from January 2018 and the site-specific monitoring plan.

ANR appears to be in compliance with the emission limits from above with the records provided:

- The highest daily emission of VOC was 0.2 pounds per day which is less than 45.5 pounds per day.
- The highest 12-month rolling VOC emissions of VOC was 0.013 tons per year reported in June 2018 which is less than 8.3 tons per year.
- The highest 12-month rolling benzene emissions was 0.0 ton per year which is less than 1 ton per year.
- ANR conducted a stack test on the thermal oxidizer in September 2015 to show compliance with the BTEX limit. The report indicated the emissions are less than the BTEX limit of 1.49 megagrams per year.

The process vents for the glycol dehydration system are controlled by a combination of control devices, a thermal oxidizer and a condenser, through a closed-vent system. Records indicated when the thermal oxidizer unit was operational the temperature was greater than 1400°F. They did not use the condenser in this time frame.

The facility has two continuous parameter monitoring systems (CPMS) for temperature on the thermal oxidizer and the condenser. The facility calibrates their glycol dehydration system natural gas flow meter to +/- 2.0%. The facility used the GlyCalc™ Version 3.0 or higher to calculate their BTEX emissions. The leak detection and repair (LDAR) report from January 4, 2018 shows that there were no leaks during their annual Method 21 on December 18, 2017. Attached is the site-specific monitoring plan and the LDAR report. All of the annual and semi-annual reports have been submitted on time since the last inspection with no deviations.

EUCPGENERATOR

The non-resettable hour meter on the emergency generator indicated 530.1 hours at the time of the inspection. I reviewed ANR's log book and each entry indicated the start and end time on the hour meter, the date, and reason for operation. They did use their generator for emergency use in 2017 and 2018. The generator operated 32.6 hours from August 15, 2017 to August 28, 2018 which is under the emergency generator limit of 100 hours. The facility performs maintenance every year on the generator and it is not used for demand response.

FGRULE285 (mm)

ANR did not report any natural gas releases since the last inspection in 2016.

Conclusion

Based on the inspection, ANR Pipeline Company – Capac Compressor Station appears to be in compliance with applicable air quality regulations.

NAME LM

DATE 9/14/18

SUPERVISOR SK