

Scanned 4-22-14

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

B721924753

FACILITY: ANR Pipeline Co. South Chester Compressor Station		SRN / ID: B7219
LOCATION: 6327 Old State Rd., JOHANNESBURG		DISTRICT: Gaylord
CITY: JOHANNESBURG		COUNTY: OTSEGO
CONTACT: Barry Fisher		ACTIVITY DATE: 03/27/2014
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection for FCE		
RESOLVED COMPLAINTS:		

On March 27, 2014, I inspected ANR Pipeline South Chester Compressor Station. I did not find any violations during my inspection. This was an unannounced scheduled inspection. The facility is operating under Renewable Operating Permit MI-ROP-B7219-2012.

#### Glycol Dehydrator, emission unit EUSCGD006

The dehydrator was not operating at the time of my inspection. It would normally operate during the gas withdrawl season, which would be during the winter months.

Condition II.1 limits natural gas processed through the dehydrator to 225 MMCF/day. According to plant records for February 2014, attached, the most the facility processed was 208 MMCF/day.

Condition III.1 states the dehy should not operate unless the <sup>condenser</sup> exhaust temperature is 160 degrees f or less. The dehydrator was not operating at the time of my inspection, so its temperature was the same as the ambient air. Mr. Fisher told me that the condenser is set to sound an alarm and shut down at a temperature lower than this. The idea is to provide a safety margin so they can shut down before they have a violation. Therefore they have no incidents to report in which temperatures violated this permit condition.

The withdrawl season is in the winter, and the temperature of the condenser is usually approximately the ambient winter air temperature. Attached records for February, 2014, indicate this was generally in the range of 0 to 30 degrees f although there was one day when they recorded 73 degrees f for the condenser temperature.

Condition III.2 states that sweet natural gas shall be the only fuel used in the dehy burner. The facility stores pipeline quality natural gas, which is sweet. There were no tanks for other liquid or gaseous fuels.

Condition III.3 limits glycol circulation to 6 gallons per minute. Mr. Fisher told me that the glycol pumps are designed to run at this rate.

Conditon IV.1 requires a properly operating condenser. The dehy was not operating at the time of my inspeciton. The condenser was installed and appeared to be in good condition.

Conditon IV.2 requires a temperature monitor on the condenser. The plant computer control screen shows a readout for this temperature, and I confirmed there was a temperature monitor attached to the condenser at the proper point on the base of the exhaust stack.

Condition VI.1 requires logging alarm events from the condenser temperature monitor. Mr. Fisher told me this is monitored and is recorded remotely at the Blue Lake station. However, there were no alarms this winter, so none were recorded.

Condition VI.2 requires recording hours of operation per calendar month and 12 month rolling time period. Condition VI.6 requires recording VOC and benzene emissions per month and per 12 month rolling time period. These records are being kept. Attached records say the condenser operated 657.4 hours in February 2014. It processed 5,343.1 MMCF. VOC emissions were estimated to be 513.1 pounds and benzene 48 pounds.

Conditions VIII.1 and 2 set stack dimensions as, for the still column, maximum diameter 2 inches,

minimum height 24 feet; for the reboiler, no diameter specified, minimum height 22 feet. The stacks for the dehydrator appeared to meet these specifications.

Two reciprocating natural-gas fired engines, flexible group FGSCENG:

Condition III.1 requires using only sweet natural gas as fuel. The facility stores pipeline quality natural gas, which is sweet. I didn't see any tanks large enough to contain any other liquid or gaseous fuel for the engines.

Condition VI.1 requires recording fuel consumption for each engine for each calendar month. Condition VI.2 requires recording engine hours of operation per month. Condition VI.3 requires calculating NOx emissions for each month. These records are being kept. Attached records give the following values: EUSCENG003 did not operate in February, 2.5599 MMSCF fuel used in March, 112.42 hours operation in March. EUSCENG002 did not operate in February or March.

I confirmed emission data is being kept although I forgot to get copies. A MAERS report based on this data for 2013 is attached. It indicates 11.2 tons CO, 30.4 tons NOx and 4.3 tons of VOC emitted in 2013. Using hours of operation reported on the engines leads to an estimate of 28.8 pounds NOx per engine operating hour. The limit is 72.9 pounds NOx per engine operating hour, from permit table FGSCENG Condition I.1.

Note the company is reporting three engine emission units. One is EUSCGEN001, the emergency generator. The other two are the compressor engines EUSCENG002 and EUSCENG003. This is why the compressor engine emission unit IDs end in "2" and "3" even though there are only two of them.

Condition VIII.1 and 2 require the stacks for the engines to have a maximum diameter of 24 inches and minimum height of 49 feet. The stacks appeared to meet these specifications.

Neither engine was operating today.

Emergency generator EUSCGEN001:

Condition IV.1 requires a non-resettable hour meter. This is present.

Condition VI.1 requires keeping records of yearly hours of operation. This record is being kept. It indicates 1.1 hours of operation in February. Last year's records of hours of operation are present and appear complete.

The facility also includes a boiler for building heat, rated 1.674 MMBTU/hr heat input and four natural gas fired withdrawal heaters rated at 10 MMBTU/hr heat input each. Maintenance of the facility appears good. I did not notice any odors onsite. I did not check for opacity, as no major equipment was operating at the time of my inspection.

NAME William J Rogers, Jr.

DATE 4/3/2014

SUPERVISOR 