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

0100024100			
FACILITY: ANR Pipeline - Central Charlton Compressor Station		SRN / ID: B7390	
LOCATION: 14490 Beckett Road, JOHANNESBURG		DISTRICT: Gaylord	
CITY: JOHANNESBURG		COUNTY: OTSEGO	
CONTACT: Barry Fisher		ACTIVITY DATE: 02/27/2014	
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR	
SUBJECT: Scheduled inspection	n for FCE		
RESOLVED COMPLAINTS:			

On March 27, 2014 I inspected ANR Pipeline Central Charlton 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-B7390-2012.

Note that most of the records for fuel consumption, operating hours, and the like are kept at the South Chester facility, B7219. Some records are computerized and kept at or available from the Cold Springs-Blue Lake facility.

Glycol Dehydrator, emission unit EUCTGDS001

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. Example records, attached, indicate throughput is less than this. In February 2014 the highest day was 210.7 MMCF.

Condition III.1 states the dehy should not operate unless the 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 they set the alarm point for this equipment below 160 degrees f, to allow them to react before they have a violation. Perhaps for this reason they had no incidents of operating over temperature to report. Records for February, attached, indicate that the usual operating temperature of the condenser was between 0 and 25 degrees f, which is about what the ambient outdoor temperature was in that month.

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 three gallons per minute. Although they have multiple pumps, they only run one at a time. This is adequate for dehydrating the gas, so there is nothing to be gained by a higher circulation 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 exhaust stack. Temperature indicated was the same as ambient air temperature. Since the dehydrator was not operating, a properly operating temperature monitor should have shown ambient temperature, as this one did.

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. In February the dehydrator operated for 589.8 hours. Total througput was 4,230.8 MMCF, VOC emissions 423.2 pounds, benzene 50.8 pounds.

Conditions VIII.1 and 2 set stack dimensions as, for the still column, maximum diameter 2 inches, minimum height 25 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 FGCTREC:

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.

I obtained copies of engine operating and fuel use records. These indicate Compressor Engine 1 did not operate in this time. This is consistant with on-site observations that Engine 1 is out of operation due to compressor failure. The compressor is partially disassembled and is awaiting repair. Compressor 2 did not operate in February. In March it operated for 114.75 hours and consumed 2.3465 MMSCF of fuel.

I forgot to get emissions data at the time of my inspection. It is being kept and is used to calculate emissions for the annual MAERS report. According to the MAERS report for 2013, during the year the facility emitted 13.0 tons CO, 17.9 tons NOx, 1.8 tons PM, and 5.5 tons VOC. Based on engine hours of operation and reported emissions, the engines emitted on average 8.12 pounds NOx per operating hour per engine. This complies with the permit limit of 53 pounds NOx per hour.

The compressors were not operating at the time of my inspection.

Emergency generator EUCTGEN001

Condition IV.1 requires a non-resettable engine hour meter. The meter is present. It indicated 1726.7 hours total operation.

Condition VI.1 requires recording engine hours of operation. This information is being kept. Example records, attached, indicate the generator operated 1.8 hours each in January and February, for maintenance and operational readiness. In March there was a commercial power failure and the generator operated during this, for a total of 45.6 hours.

The previous year's records for hours of operation are present and complete.

The facility also contains one natural gas fired boiler for building heat, rated at 98.9 horsepower. I didn't find its heat input but it was far too small to have 50 MMBTU/hr heat input, and would therefore be exempt from permit requirements under Rule 282(b)(1).

The facility contains four natural gas fired withdrawl heaters, rated at 10 MMBTU/hr heat input each. These are also exempt from permit requirements under Rule 282(b)(1).

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.

4/3/2014

SUPERVISOR