DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

B719868300

FACILITY: ANR Pipeline-Cold Sprn	SRN / ID: B7198				
LOCATION: 10000 Pflum Rd., MAN	DISTRICT: Gaylord				
CITY: MANCELONA	COUNTY: KALKASKA				
CONTACT: Ben Samuelkutty , Envi	CONTACT: Ben Samuelkutty , Environmental Analyst				
STAFF: David Bowman	SOURCE CLASS: MAJOR				
SUBJECT: Scheduled inspection for FY 23 FCE					
RESOLVED COMPLAINTS:					

On 7/14/2023 I, David Bowman MI EGLE AQD, conducted a scheduled site inspection for B7198 ANR pipeline, a three-section permit, operating under the conditions of MI-ROP-B7198-2014a. Source is located at 10000 Pflum Road, Kalkaska, MI. To get to the source travel south from Mancelona on US 131 turning south an Darragh Rd NE for 3.3 miles and turn East on Starvation Lake Rd for 3.0 miles. Turn south onto Barnhardt Rd for 0.5 miles, the East on Pflum Rd for 1 mile and the destination is on the north side of the road. It is easily visible from Pflum Rd. I met with Ben Samuelkutty, Environmental Analyst for USNG pipelines and TC Energy. Ben escorted me around the facility and answered questions as they arose. I did receive an updated safety orientation to the plant from onsite plant employees.

For the inspection the temperature was in the mid 60's, partly cloudy, and light winds. The site was clean and there were no discernable odors upon my arrival. We inspected in the order of Cold Springs 1, Blue Lakes, and the ended with cold Springs 12. There was lots of maintenance occurring in the area and a major project being worked on in Blue Lakes that is going to be discussed later in this report. During the inspections of stacks I used the Nikon Forestry PRO II to estimate the stack height and visually estimated the stack diameter.

Section 3 - Cold Springs 1 (CS1) Compressor Station-- during the inspection CS1 was not in operation. Operation is seasonal and dependent upon flow needs. In the summer the focus of the plant is moving natural gas into natural underground storage and this section of the site is not operated unless the need rises for increased flow.

EUCS1GLYDHY – system is in a small roof covered structure with secondary containment. The piping and devices appear to be in good working order. All the piping and connections appear well maintained.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Glycol re-circulation rate shall not exceed a max of 960 gallons per hour...

Discussion – At time of inspection rate was zero due to being off.

2. Permittee shall not process natural gas unless a flash tank is installed....

Discussion – there is a flash tank installed.

3. Except as allowed in conditions, permittee shall not process natural gas unless the glycol reboiler is vented through a condenser and thermal oxidizer operating in series...

Discussion – tracing of the piping indicated that system is vented through the condenser and thermal oxidizer in series.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. EUCS1GLYDHY shall be equipped with a thermal oxidizer.

Discussion – I observed the thermal oxidizer.

2. EUCS1GLYDHY shall be equipped with a condenser.

Discussion - I observed a condenser.

3. EUCS1GLYDHY shall be equipped with a flash tank.

Discussion - I observed a flash tank.

4. Permittee shall install, calibrate, etc a device to monitor the thermal oxidizer and condenser exhaust gas...

Discussion- I observed the device at EUCS1GLYDHY. The data is sent to the control room where I observed the control panel display that the operators utilize when the system is functioning.

5. EUCS1GLYDHY thermal oxidizer and condenser shall be designed with alarms...

Discussion – the control panel is designed to send an alarm to the operator in the event of temperature failures.

VIII. STACK/VENT RESTRICTIONS

Stack	Max Diameter (inches)	Minimum height above ground (feet)	Estimated diameter (inches)	Estimated height (feet)
SV 011B (condenser)	2	44	2	64
SV 011A (Thermal Oxidizer)	20	31	20	50

FGCS1DDDDD

Stack		

	(inches)	1		Estimated height (feet)
SV 011C (thermal Oxidizer)	2	31	2	50

FGCS1CNDTANKS – The four tanks are in secondary containment, and all appeared to be in a good state of repair. All piping and fittings appeared in good working order.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Permittee shall not operate FGCS1CNDTANKS unless a malfunction abatement plan (MAP)...

Discussion – There is an approved MAP on file with the Gaylord District Office dated 12/10/2018. Section 4.1 covers the requirements for the MAP in relation to the thermal oxidizer. Site conditions indicate that the MAP is being followed, records required in the MAP were reviewed during the records review of the site.

2. Permittee shall not operate EUCS1CNDTANKS unless thermal oxidizer is....

Discussion – As reported earlier CS1 is currently shut down and not processing. Thermal Oxidizer was off and no processing was taking place in EU.

3. Permitee shall install, calibrate, etc. device to monitor and record thermal oxidizer...

Discussion – I observed the device at the thermal oxidizer. I saw the control room operators display that relays the information to the operator.

Section 2 Blue Lakes (BL) Compressor Station-

EUBLGLYDHY

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Permittee shall not use stripping gas...

Discussion - records reviewed indicate no stripping gas is used.

2. Permittee shall not use unless glycol flash tank is installed.

Discussion – I observed the flash tank installed, it was clean, and appeared to be well maintained.

3. Except as provided in the condition...shall not operate unless a thermal oxidizer is installed...

Discussion – I observed the thermal oxidizer, it was clean, and appeared to be well maintained.

4. In thermal oxidizer malfunctions, the permittee may operate provide condenser is installed and operating properly...

Discussion – The condenser was being maintained during the time of inspection. There were contractors onsite actively maintaining the condenser.

5. Sweet gas shall be only fuel...

Discussion – There was no odors onsite that would indicate that sour gas is used. Records indicated sweet gas only.

- VI. DESIGN/EQUIPMENT PARAMETERS
- 1. shall be equipped with thermal oxidizer...

Discussion –I observed a thermal oxidizer.

2. shall be equipped with condenser...

Discussion - I observed a condenser.

3. shall be equipped with flash tank...

Discussion - I observed a flash tank.

4. thermal oxidizer and condenser shall be equipped with temperature monitoring systems...

Discussion – there is a temperature monitoring system, I observed the system that is monitoring and I have seen the display on the control room operators display that receives the data. The DEHY was not operating at the time of inspection so no data was available on the display.

5. maximum flow from the glycol pump shall not exceed 60 gallon per minute...

Discussion At time of inspection the EU was not operating, onsite crew stated the pump did not exceed 60 gallon per minute.

Stack/Vent	Max. diameter in Inches	Min. height above ground in feet	diameter in inches	Estimated height above ground in feet
SV-110 Reboiler dehydrator	16	32.8	16	50
SV-111C condenser	3.6	25	3	25
SV-111TI thermal oxidizer	NA	25	24	25

FGBLCMPRS

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Permittee shall use only sweet natural gas...

Discussion – Records reviewed indicated only use of sweet gas. There was no odor onsite to indicate any sour gas is used.

VI. MONITORING/RECORDKEEPING

5. Permittee shall continuously monitor and record torque and speed...

Discussion – records are printed daily and stored in the control room. I reviewed the records for 11 July 2023. On this day EUCMPRS A and C were not operating. EUCMPRS B recorded RPM 325 and Torque of 93.

VIII. STACK/VENT RESTRICTIONS

Stack/Vent	Max. Exhaust diameter in inches	_	Estimated exhaust diameter in inches	
SV-101A compressor A	48	70.5	48	71
SV-101B compressor B	48	70.5	48	71
SV-101C compressor C	48	70.5	48	71

FGBLHEATERS

III. PREOCESS/OPERATIONAL RESTRICTIONS

1. Permitee shall only use natural sweet gas...

Discussion – Records indicate that only sweet gas is used and there was no odors to indicate that sour gas is used at the process.

Stack		

	Max. Exhaust diameter in inches	Min. height above ground in feet	Est. exhaust diameter in inches	Est height above ground in feet
SV-107 EU BLHEATER-A	42	40	3 stacks at 42 inches	22 each
SV-108 EU BLHEATER-B	42	_		No Stacks – under construction

There is a current minor modification packet, submitted to AQD on April 9, 2021 to replace the current heaters, EUBLHEATER -A and EUBLHEATER-B with EUHEATER-C and EUHEATER-D. This is in process of being incorporated into the ROP Renewal. Currently ROP Central unit is in process of making changes to the ROP.

FGBLGENS

1. Permitee shall use only natural sweet gas...

Discussion – Records indicate that only natural sweet gas is used. There were no odors to indicate that sour gas is used.

2. Permittee shall not operate unless the catalytic oxidation system in installed and operating...

Discussion – the catalytic oxidation system is installed and operating during the time of inspection.

3. Permittee shall not operate unless lean burn/clean burn system in installed and operating...

Discussion – the system is installed and operating during the inspection.

4. Permittee shall not operate unless the air/fuel ratio control system is installed and operating...

Discussion – The air/fuel ratio control system was operating at the time of inspection.

6. Permittee shall not operate unless the inlet and outlet temperature across the catalyst....

Discussion – temperatures are monitored, and part of the control room operators display to ensure that the temperatures are within those stated in the MAP of 123-140 $^{\circ}$ F. Temperature at time of inspection was 130 $^{\circ}$ F.

•	Max. Exhaust diameter in inches	Min Height above ground in feet	Est. exhaust diameter in inches	Est. height above ground in feet.
SV-104 GEN A	10	64.6	10	70

SV-105 GEN B	10	64.6	10	70	
SV-106 GEN C	10	64.6	10	70	

FGBLCLEANERS

III.PROCESS/OPERATIONAL RESTRICTIONS

1. cleaned parts shall drain for no less than 15 seconds or until dripping ceases...

Discussion – that is the process that the operator stated is used. There was no use during the inspections and the lid was closed and secured.

2. Permittee shall perform routine maintenance as recommended by the manufacturer...

Discussion – All maintenance is contracted to Safety Klean company, a third party contractor that specializes in this type of cleaner.

- VI. MONITORING/RECORD KEEPING
- 1. Each new cold cleaner in which solvent is heated...

Discussion - The solvent is not heated.

2. Permittee shall maintain information on file...

Discussion – site maintains required information on file.

3. Permittee shall maintain written operating procedure...

Discussion – written operating procedure is on sticker on the cold cleaner.

SECTION 1 Cold Springs 12 Compressor Station

EU CS12GLYDHY

Was not operating at the time of inspection.

- III. PREOCESS/OPERATIONAL RESTRICTION(S)
- 1. The permittee shall not use any stripping gas...

Discussion – Records reviewed indicate no stripping gas is used.

2. Permittee shall not operate unless a glycol flash tank is installed...

Discussion – A flash tank is installed.

3. Except as provided below permittee shall not operate unless a thermal oxidizer is installed and operating properly...

Discussion – a thermal oxidizer is installed but was not operating at the time of inspection.

4. If the thermal oxidizer malfunctions may operate if a condenser is installed and operating properly...

Discussion – a condenser is installed but was not operating at the time of inspection.

5. Sweet gas shall be only fuel...

Discussion – Records indicate that only sweet gas is used. There were no odors present to indicate the use of sour gas.

IV. DESIGN/EQUIPMENT PARAMETERS

1. Shall be equipped with a thermal oxidizer...

Discussion - I observed a thermal oxidizer.

2. Shall be equipped with a condenser...

Discussion - I observed a condenser.

3. Shall be equipped with a flash tank...

Discussion - I observed a flash tank.

4. thermal oxidizer and condenser shall be equipped with working temperature monitors...

Discussion – there are sensors to monitor the working temperatures and those transmit to the control room operators display.

5. thermal oxidizer and condenser shall each be designed and equipped with alarms if the temperature is less than...

Discussion – the sensors transmit temperature data to the control room operator display. There are alarms built into the system based upon less than 1400°F for the thermal oxidizer and above 120°F. With system off line during time of inspection I was not able to get a reading of the temperatures. Records of temperatures during operation were reviewed during the records review.

Stack	Max. exhaust diameter in inches	Min. height above ground in feet	Est. exhaust diameter in inches	Est. height above ground in feet
SV-010A Thermal Oxidizer	NA	17	14	27
SV-010B condenser	3	17	3	27

FG CS12CMPRS

EUCS12CMPRS-A and EUCS12CMPRS-C were not operating. EUCS12CMPRS-B was operating at 323 RPM, Oil PSI 46; Turbo Oil PSI 30; Torque 90

III. PROCESS/OPERATIONAL PARAMETERS

2. The permittee shall operate per the AQD approved MAP...

Discussion – Gaylord District Office has a copy of the current approved MAP dated 11 Dec 2014. The MAP covers this EU as well as others in other sections. Section 2.1 is specific to the EU FGCS12CMPRS. Indications at the source appeared to support the MAP is being implemented, records from the MAP were reviewed during the records review.

VIII. STACK/VENT RESTRICTION(S)

Stack	Max. exhaust diameter in inches	Min. height above ground in feet	Est. exhaust diameter in inches	Est. height above ground in feet
SV001 EUCS12CMPRS-A	30	49.2	30	64
SV002 EUCS12CPMPRS-B		49.2	30	64
SV003 EUCS12CMPRS-C	30	49.2	30	64

FGCS12ZZZZ Emergency Generators

Two emergency generators, Waukesha engines, EUCS12ERMGEN-A and EUCS12EMERGEN-B. Currently EUCS12EMERGEN-A is tagged out of service and did not appear to be connected to the breaker bank at the site.

IV. DESIGN/EQUIPMENT PARAMETERS

1. Permittee shall equip with a non-resettable hour meter...

Discussion – EUCS12EMERGEN-B has an hour meter installed in the breaker bank and current reading is 103689.1. EUCS12EMERGEN-A has no meters, does not appear to be connected to the breaker bank. Ben reported that EUCS12EMERGEN-A has been out of service since10/17/2016.

DATE 11-20-23