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

N782035027

FACILITY: TRENDWELL ANTRIM INC - AVERY 18		**SRN / ID:** N7820
LOCATION: NW SE SE SECTION 18, VIENNA TWP		**DISTRICT:** Cadillac
CITY: VIENNA TWP		**COUNTY:** MONTMORENCY
CONTACT:		**ACTIVITY DATE:** 06/15/2016
STAFF: Kurt Childs	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: 2016 FCE.		
RESOLVED COMPLAINTS:		

2016 Full Compliance Evaluation (FCE) including site inspection and records review for Trendwell Energy Corporation (TEC) Avery 18 facility, PTI 197-07D.

INTRODUCTION

I conducted a Full Compliance Evaluation of the Trendwell Energy (TEC) Avery 18 facility to determine compliance with Permit To Install (PTI) number 197-07D and the Air Pollution Control Rules. Numerous changes have taken place over the years to the compressor engines on-site and these have been reflected in updates to the Malfunction Abatement Plan (MAP).

At the time of the inspection the weather was overcast with rain, 60 degrees Southeast winds. Equipment at the facility consisted of a compressor building and outdoor glycol dehydrator as well as a brine and a blow-down tank in a containment area. There are no heaters, flares, or natural gas liquids separation equipment.

OBSERVATIONS

The compressor building currently houses two compressor engines, Unit 57 - a 145 hp Caterpillar 3306 and Unit 877 – a Caterpillar G398TA. However, Unit 57 was not operating at the time of the inspection. Both engines are identified on the most recent revision to the Malfunction Abatement Plan (MAP) dated March 2016. Records indicate both units operated during 2015. Unit 877 was running at 1193 rpm and 60 psi oil pressure. This engine is equipped with catalytic converter and the temperature readings were 912 degrees F at the inlet and 1054 degrees F at the outlet. These observations were consistent with readings recorded on the log sheets at the facility.

Additionally, there was a small V-8 engine and what appeared to be a small compressor system, mounted to a trailer that was parked on the north side of the building with hoses running into the building. This system had a sign on it that read "Natural Gas Services Group – "Wellmaker" GS12C Unit 7779". The engine was running and the hoses were connected to the piping going to and from Unit 57. It appears this system is being used as a replacement for, and bypassing Unit 57.

EUDEHY

II.1. Sour gas is not burned in EUDEHY.

III.1. and VI. 1.1 – 5. The dehy meets the exemption criteria for glycol dehydrators based on an annual average flow rate of less than 85,000 cubic meters per day and maintains the required records.

V.1. Verification of H2S content of gas has not been requested.

FGENGINES

PTI 197-07D contains NOx and CO emissions for two engines, the limits are all different but there is not documentation in the Permit file to indicate which engine is which. They are identified in the PTI as EUENGINE1 through EUENGINE2. TEC records indicate the following engine associations with each equipment ID from the permit:

EUENGINE1	398 HCTA W/CC (Unit 877)
EUENGINE2	G3306 NA W/CC (Unit 57)

Based on this information it appears EUENGINE1 is the remaining, operating engines.

The emission limits that apply to these two engines are as follows:

EMISSION LIMIT	EUENGINE1	EUENGINE2
NOx	6.4 tpy	3.38 tpy
CO	13.4 tpy	3 tpy

I.1-4., VI.6. and VI.7. The attached records provided by TEC for January 2015 through July 2015 indicate that these two engines were in compliance with the emission limits identified above. The highest 12-mos. rolling NOX and CO emissions from EUENGINE1 occurred in January 2015 at 3.70 and 7.78 tons respectively. The highest 12-mos. rolling NOX and CO emissions from EUENGINE2 occurred in October 2015 at 1.53 and 0.31 tons respectively.

II.1. Sour gas is not burned in FGENGINES.

III.1. The facility has an active PM/MAP that was most recently updated and approved on May 18, 2016 to revise the engines that are on-site.

III.2. and VI.4. Records provided by TEC (attached) indicate that the facility did not operate without the catalytic converters on EUENGINE1 and EUENGINE2. The only catalytic converter downtime coincides with facility downtime.

III.3. and IV.1. These special conditions require proper installation, maintenance and operation of the control device. The catalytic converter on EUENGINE1 appeared to be installed and operating properly based on the operating parameters (inlet and outlet temperature) that were observed and recorded. Records observed on the log sheet for EUENGINE2 indicate the catalytic converter was operating properly the last time it ran 6/7/2016.

IV.2.,VI.2. and VI.5 The amount of natural gas used by each compressor engine is being monitored and recorded as required. There is no limit on usage.

V.1. and 2. NOx, CO emissions and H2S content testing have not been requested.

VI.1. Monthly emission calculations are maintained (attached) and indicate compliance with the individual emission limits.

VI.3. Significant maintenance activities are being logged and maintained (see attached).

VIII.1. and 2. The stack parameters for the emission units do not appear to have changed since the last inspection and appear compliant with the permit specifications.

CONCLUSION

Following the inspection additional information was requested regarding the portable/temporary engine that was observed on-site. TEC responded indicating that the unit was being used for testing during a two week period after which EUENGINE2 will resume operation. If the testing is successful they may replace EUENGINE2 with a smaller unit in the future.

As a result of the inspection and the records review it appears the Avery 18 facility is in compliance with PTI 197-07D at this time.

NAME  DATE 6-20-16 SUPERVISOR