# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

N614335026

FACILITY: TRENDWELL ANTRIM INC - Albert 16/Albert 17		SRN / ID: N6143
LOCATION: SW NW NW T29N R1E SEC 15, ALBERT TWP		DISTRICT: Cadillac
CITY: ALBERT TWP		COUNTY: MONTMORENCY
CONTACT: Danita Greene ,		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) Albert 16/17 facility, PTI 701-96B and 205-07B.

#### INTRODUCTION

I conducted a Full Compliance Evaluation of the Trendwell Energy (TEC) Albert 16/17 facility to determine compliance with Permit To Install (PTI) numbers 701-96B and 205-07B and the Air Pollution Control Rules. PTI 701-96B was issued for the Albert 16 portion of the facility. It has been succeeded by PTI 205-07B which covers both the Albert 16 and 17 and should be voided. 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 for both the Albert 16 and Albert 17. There are also two shared brine and blow-down tanks in a containment area. There are no heaters, flares, or natural gas liquids separation equipment.

#### **OBSERVATIONS**

The Albert 16 compressor building currently houses two Caterpillar G398 compressor engines Unit 937 and 938. However, Unit 937 no longer operating and has been removed from the most recent approved version of the MAP (March 2016). Records indicate Unit 937 did operate during 2015 however. Unit 938 was running at 1113 rpm and 62 psi oil pressure. This engine is equipped with catalytic converter and the temperature readings were 879 degrees F at the inlet and 946 degrees F at the outlet. These observations were consistent with readings recorded on the log sheets at the facility.

The Albert 17 compressor building currently houses a Cat G3408 compressor engine (Unit 314) that was not operating and appears to have been decommissioned. Records indicate this engine did operate during 2015. There is also a Cat G3516 (Unit 1326) that was operating at the time of the inspection. Only the G3516 engine is included in the most recent MAP update. It was operating at 1229 rpm with 48 psi oil pressure and is not equipped with a catalytic converter. The observed readings were also consistent with entries in the log sheets.

#### **EUDEHY**

- 1.1 and 2. 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.
- 1.3 6. Records of natural gas flow rate and emission calculations are maintained (see attached).

### **FGENGINES**

PTI 205-07B contains NOx and CO emissions for five 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 EUENGINE5. TEC records indicate the following engine associations with each equipment ID from the permit:

EUENGINE1	398 HCNA W/CC (Unit 937)
EUENGINE2	398 HCNA W/CC (Unit 938)
EUENGINE3	3516 LE (Unit 1326)
EUENGINE4	Removed 11/2011
EUENGINE5	3408 LE

Based on this information it appears EUENGINE2 and EUENGINE3 are the remaining, operating engines.

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

EMISSION LIMIT	EUENGINE2 (Albert 16)	EUENGINE3 (Albert 17)
NOx	6.1 tpy	49.4
CO	13.2 tpy	23.2

- 2.1. The attached emission records covering the period from January 2015 to October 2015 provided by TEC indicate that these two engines, as well as the other two when they were operating, were in compliance with the above applicable emission limits. The highest 12-mos. rolling NOX and CO emissions from EUENGINE2 occurred in October 2015 at 2.41 and 5.19 tons respectively. The highest 12-mos. rolling NOX and CO emissions from EUENGINE3 also occurred in October 2015 at 22.41 and 10.95 tons respectively.
- 2.2 The facility has an active PM/MAP dated March 2016, that was most recently updated and approved on May 18, 2016 to revise the engines that are covered.
- 2.3, 2.9. Records provided by TEC (attached) indicate that the facility did not operate without the catalytic converters on EUENGINE2. The only catalytic converter downtime coincides with facility downtime.
- 2.4. This special condition requires proper installation, maintenance and operation of the control device. The catalytic converter on EUENGINE2 appeared to be installed and operating properly based on the operating parameters (inlet and outlet temperature) that were observed and recorded.
- 2.5. NOx and CO testing has not been requested by the AQD District Supervisor.
- 2.6 and 2.10. The amount of natural gas used by each compressor engine is being monitored separately and recorded as required. There is no limit on usage.
- 2.7, 2.11, 2.12. Monthly emission calculations are maintained (attached) and indicate compliance with the individual emission limits.
- 2.8. Significant maintenance activities are being logged at the facility (see attached).
- 2.13. The stack parameters for the emission units do not appear to have changed since the last inspection and appear compliant with the permit specifications.

## **FG-FACILITY**

- 3.1 Sour gas is not burned in the engine.
- 3.2 Verification of H2S content has not been requested.

#### CONCLUSION

As a result of the inspection and the records review it appears the Albert 16/17 facility is in compliance with PTI 205-07B at this time. Follow-up will be initiated to void PTI 701-96B.

NAME 10

DATE 6-20-16

SUPERVISOR