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

N614631044

FACILITY: TRENDWELL ANTRIM INC - BRILEY 9		SRN / ID: N6146
LOCATION: SW NW SE T30N R2E SEC 8, BRILEY TWP		DISTRICT: Cadillac
CITY: BRILEY TWP		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 08/26/2015
STAFF: Kurt Childs	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2015 FCE		
RESOLVED COMPLAINTS:		

N6146 Trendwell Energy Briley 9

Full Compliance Evaluation

INTRODUCTION

I conducted a Full Compliance Evaluation of the Trendwell Energy (TEC) Briley 6 to determine compliance with opt-out permit number 704-96A and the Air Pollution Control Rules. The weather was overcast, 55 degrees with light west winds. The source was originally permitted with four compressor engines but currently includes just two natural gas fired RICE; EUENGINE1 - Unit 951 a 930 hp Caterpillar 399TA engine and EUENGINE3- Unit 853 a Caterpillar 3512LE 810hp V-12 rich burn engine with a catalytic converter.

EU-DEHY

No requirements other than to comply with Subpart HH if applicable.

There were noticeable visible emissions or and odors from the dehy which did appear to be equipped with a condenser.

FGENGINES

EUENGINE1 and EUENGINE3

2.2 The facility has an active PM/MAP that was most recently updated and approved on April 16, 2014 with current operating variables.

2.3, 2.9. Records are maintained (attached) that indicate that EUENGINE1 did not operate without the catalyst during the review period.

2.4. The facility has installed the catalyst which was replaced on 9/26/2014 according to facility records.

2.5. NOx and CO testing has not been requested by the AQD District Supervisor in the last 12 months.

2.6. 2.10. The amount of natural gas used by the compressor engine is being monitored and recorded as required. There is no limit on usage. Facility records indicate that 12-month rolling time period fuel usage is around 100 MMcf.

2.7, 2.11, 2.12. Monthly emission calculations are maintained (attached) and indicate compliance with the individual emission limits for EUENGINE1 and EUENGINE3. The EUENGINE1 12-month rolling time period CO limit is 19.4 TPY and 9.3 TPY NOX. 12-month rolling time period CO emissions were around 11.5 tons per year and monthly NOx emissions were around 5.5 TPY. The EUENGINE3 12-month rolling time period CO limit is 12.5 TPY and 19.3 TPY NOX. 12-month rolling time period CO emissions were around 7.8 tons per year and monthly NOx emissions were around 15.2 TPY.

2.8. Significant maintenance activities for the two remaining engines are being logged at the facility (see attached).

2.13. The stack parameters for the two remaining engines do not appear to have changed since the last inspection and appear compliant with the permit specifications.

At the time of the inspection EUENGINE1 was operating at 851 rpm at a coolant temperature of 185 degrees F and 50 psi oil pressure. Catalyst inlet and outlet temps were 939 degrees F and 924 degrees F respectively. An 8/14/15 log entry indicated the catalyst differential pressure was 3.5". EUENGINE3 was operating at 1018 rpm with 60 psi oil pressure, the coolant temp gauge was not working. Neither engine was generating any visible emissions at the time of the inspection.

FG-FACILITY

3.1 no sour gas

3.2 Verification of H2S content has not been requested.

CONCLUSION

As a result of the inspection and the records review it appears the Briley 9 facility is in compliance with PTI 704-96A at this time.

Following the inspection I informed the company of the EUENGINE1 inverted catalyst temperatures and requested additional information on 10/12/2015, 11/09/2015, 11/19/2015 and 12/08/2015. The response was received from Otwell Mawby, P.C. on December 15, 2015 (attached). The response indicates that EUENGINE1 experienced an intermittent pre/post temperature inversion due to low fuel pressure that is believed to have affected engine performance. The return of normal Pre/post temperatures coincided with the restoration of proper fuel pressure.

NAME _____ DATE 12-15-15 SUPERVISOR _____