

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

N614531042

FACILITY: TRENDWELL ANTRIM INC - BRILEY 6		SRN / ID: N6145
LOCATION: SE NW NW T30N R2E SEC 7, BRILEY TWP		DISTRICT: Cadillac
CITY: BRILEY TWP		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 08/26/2015
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2015 FCE.		
RESOLVED COMPLAINTS:		

N6145 Trendwell Energy Briley 6

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 202-07 and the Air Pollution Control Rules. The weather was overcast, 55 degrees with light west winds. The source includes two natural gas fired RICE; EUENGINE1 - Unit 1112 a 1,265 hp Caterpillar 3516TA lean burn engine and EUENGINE2- Unit 187 a Caterpillar 3306NA 6 cylinder rich burn engine with a catalytic converter that has replaced an original 3516TA engine.

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 not appear to be equipped with a condenser.

FGENGINES

EUENGINE1 and EUENGINE2

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 EUENGINE2 did not operate without the catalyst during the review period.

2.4. The facility has installed the three-way catalyst and the catalyst was replaced on 5/14/2014 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. The amount of natural gas used by the compressor engine is being monitored 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 combined emission limits of 23.2 TPY CO and 49.9 TPY NOx. The 12-mos. rolling time period CO emissions were around 17 tons per year and monthly NOx emissions were around 36 TPY.

2.8. Significant maintenance activities are being logged at the facility (see attached). As indicated above, EUENGINE2 has been changed out to a smaller engine. The AQD was notified and the PM/MAP updated.

2.10. Monthly fuel use records for the compressor engine are being kept. Facility records indicate that 12-month rolling time period fuel usage is around 80 - 90 MMcf.

2.13. Stack parameters for EUENGINE2 have changed due to the replacement of a larger engine with a smaller

MACES- Activity Report

engine. The new stack has a smaller diameter (approx. 4") which is still allowed by the PTI (max. dia. 12"). The height still appears to be greater than 40.5'. The stack for EUENGINE1 at the facility does not appear to have changed since the last inspection and appears compliant with the max. dia. Of 12" and min. ht. of 31.5'.

At the time of the inspection EUENGINE1 was operating at 1104 rpm at a coolant temperature of 176 degrees F and 3 psi oil pressure. EUENGINE2 was operating at 1171 rpm at a coolant temperature of 190 degrees F and 70 psi oil pressure. Catalyst inlet and outlet temps were 720 degrees F and 644 degrees F respectively. The catalyst log sheet on site indicated the outlet temperature is normally higher than inlet for this engine. Neither engine was generating any visible emissions at the time of the inspection.

Following the inspection I informed the company of the EUENGINE2 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 EUENGINE2 emissions were analyzed by Exterran on 10/08/2014 and 10/20/2015 while catalyst temperatures were inverted as observed during the inspection. The results of those analysis showed greater than 95% CO and NOx conversion rates. The Otwell Mawby response also states that EUENGINE2 has now been removed from service and will be removed from the site.


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 6 facility is in compliance with PTI 202-07 at this time.

NAME 

DATE 12-15-15

SUPERVISOR 