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

N614465796				
FACILITY: TRENDWELL ANTRIM INC - AVERY 15		SRN / ID: N6144		
LOCATION: NW SE SE T10N F	R3E SEC 15, AVERY TWP	DISTRICT: Gaylord		
CITY: AVERY TWP		COUNTY: MONTMORENCY		
CONTACT: Danita Greene, Production and Environmental Compliance		ACTIVITY DATE: 12/06/2022		
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT		
SUBJECT: 2023 FCE.				
RESOLVED COMPLAINTS:				

I traveled to N6144, the Trendwell Avery 15 Central Production Facility (CPF) for a scheduled inspection to determine compliance with PTI 198-07A. This is an opt out permit. This facility is located in Avery Township, Montmorency County.

The Avery 15 CPF is a natural gas production facility, extracting gas from the Antrim formation. Natural gas and brine fluids are extracted from wells drilled into producing reservoirs then transmitted through flow lines to a CPF. The gas is compressed by two engines, and water is removed by a glycol dehydrator.

The weather was overcast, 28 degrees with calm winds. There was a coating of fresh snow on the ground.

Staff who introduced themselves as from Riverside Energy were on site taking measurements at the time of the inspection.

LOCATION

The facility is located southeast of Atlanta. From Atlanta, travel 3.5 miles east on M-32. Go south on Hall Rd past the two curves. The dirt access road to the facility is on the west side of the road.

REGULATORY DISCUSSION

PTI 198-07A was issued November 10, 2011, voiding prior permit 198-07. The permit was updated in 2007 to reflect changing the CPF from 3 engines to 2 engines. One existing engine was switched out for a smaller engine.

The engines are subject to 40 CFR Part 63, Subpart ZZZZ, which has been delegated to EGLE from EPA. However, EGLE is not currently making compliance determinations for area sources.

The glycol dehydrator is subject to 40 CFR Part 63, Subpart HH, which has not been delegated to EGLE from EPA.

INSPECTION NOTES

The source consists of one large building containing two engines, a tank farm with two tanks, a glycol dehydrator located outdoors, and a meter building. The gate into the facility was open. The doors to the compressor building were closed.

The two engines were present and operating during the inspection. No visible emissions or odors were detected.

EUENGINE1, the north engine, is a Caterpillar 3516 TALE, 1085 hp, identified as Unit 887. The engine was operating at 1162 RPM with 57 psi engine oil pressure. These readings were consistent with those entered on the daily inspection log.

The stack height was measured using the average of three hand-held range finder readings. The measured stack height was 42 feet which is greater than the minimum stack height of 40.5 feet specified in the PTI. The stack diameter appeared to be 12 inches, which is consistent with the PTI requirements. The stack had a muffler and discharged unobstructed vertically upwards.

EUENGINE2, the south engine, is a Caterpillar 3406 HCNA 215 hp, identified on the skid and clipboard as Unit 148 (NGCS 148). The engine was operating at 1175 RPM, with 55 psi engine oil pressure. These readings were consistent with those entered on the daily inspection log. The stack had a muffler and discharged unobstructed vertically upwards.

The engine has a catalytic convertor. Catalytic converter operating temperatures were not accessible at the time of the inspection. The daily log sheet did not include a column for catalyst temperatures, and none were entered. Catalyst operating temperatures are maintained on a separate log sheet.

The stack height was measured using the average of three hand-held range finder readings. The measured stack height was 42 feet which is greater than the minimum stack height of 40.5 feet specified in the PTI. The stack diameter appeared to be 4 inches, which is consistent with the PTI requirements. The stack had a muffler and discharged unobstructed vertically upwards.

A bermed, lined tank farm is located to the north of the building. Two tanks (one 400barrel tank, one 200-barrel tank) are within the containment. The tanks are not labeled.

The glycol dehydrator is located outdoors, east of the tanks. The unit was emitting steam, light odor detected. A 55-gallon drum of triethylene glycol was located in containment next to the dehy unit.

Records provided by Trendwell included fuel usage, NOx and CO emissions calculations, Maintenance logs, catalytic converter temperature logs and records of hours of operation with-out the catalytic converter.

EUENGINE2 had 65.5 hours of operation without the catalyst.

NOx and CO emission records indicate the most recent 12-mos rolling average emissions are in compliance with the PTI emission limits as follows:

Pollutant	Limit	Calculated Actual Emissions	Equipment
NO _x	24 tpy	19.66 tpy	EUENGINE1
со	20 tpy	13.64 tpy	EUENGINE1
NO _x	6 tpy	2.36 tpy	EUENGINE2
со	2 tpy	0.33 tpy	EUENGINE2

Maintenance logs are maintained and indicate normal maintenance of each engine throughout the past year. No emission specific repairs required.

Catalytic converter daily inspection temperature logs were provided and indicate proper operation of the catalytic converter.

MAP – The MAP was updated July 2022 and approved August 25, 2022.

COMPLIANCE DETERMINATION

Based on the scheduled inspection, N6144 Trendwell Avery 15 CPF appears to be in compliance with PTI 198-07A and the Air Pollution Control Rules.

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DATE _____

SUPERVISOR