

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

N615065804

FACILITY: TRENDWELL ANTRIM INC - VIENNA 31		SRN / ID: N6150
LOCATION: NW NE SE T30N R1E SEC 31, VIENNA TWP		DISTRICT: Gaylord
CITY: VIENNA 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 N6150, the Trendwell Vienna 31 Central Production Facility (CPF) for a scheduled inspection to determine compliance with PTI 708-96B. This is an opt out permit. This facility is located in Vienna Township, Montmorency County.

The Vienna 31 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, 30 degrees with calm winds. There was a coating of fresh snow on the ground.

LOCATION

The facility is located between Johannesburg and Atlanta. From Johannesburg, travel east on M-32 to Matthews Road. Go south on Matthews Road approximately 1.5 miles, the dirt access road will be on the west side of the road. The site is visible from the road. There is a gate which was open.

REGULATORY DISCUSSION

PTI 708-96B was issued 12/15/11, voiding prior permit 708-96A. The permit was updated in 2011 to reflect replacing the previously permit EUENGINE2 with a lesser emitting engine.

PTI 708-96A was issued 9/26/2007, voided 12/15/11.

PTI 708-96 was issued 11/14/96, voided 10/4/2007.

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 west engine, is a Caterpillar G398NA, 500 hp, identified as 941 and 3805-c on the skid and clipboard. The engine was operating at 1164 RPM. The engine has a catalytic convertor. The inlet temperature to the catalytic convertor was 930 degrees Fahrenheit, while the outlet was 1027 degrees Fahrenheit. These temperatures are within the range established in the Malfunction Abatement Plan. 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 31 feet which is reasonable to determine compliance with the 31.5 foot height specified in the PTI. The stack diameter appeared to be 6 inches, which is consistent with the PTI requirements. The stack had a muffler and discharged unobstructed vertically upwards.

EUENGINE2, the east engine, is a Caterpillar 399TA, identified on the clipboard as Unit 952 and 3949-C on the skid. The engine was operating at 1123 RPM, with 65 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 stack height was measured using the average of three hand-held range finder readings. The measured stack height was 32 feet which is greater than the minimum stack height of 31.5 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.

A bermed, lined tank farm is located to the north of the building. Two tanks (one 400-barrel tank, one 200-barrel tank) are within the containment.

The glycol dehydrator is located outdoors. The unit was emitting steam, moderate odors were detected. A 55-gallon drum of triethylene glycol was located in containment next to the dehy unit.

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

NO_x 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	6.12 tpy	4.38 tpy	EUENGINE1
CO	13.20 tpy	9.45 tpy	EUENGINE1
NO _x	9.32 tpy	4.53 tpy	EUENGINE2

Pollutant	Limit	Calculated Actual Emissions	Equipment
CO	19.36 tpy	9.41 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. The records indicate a consistent temperature increase across the converter throughout the review period.

EUENGINE1 had 72 hours of operation without the catalyst but is allowed up to 200 hours per year. EUENGINE2 had 169 hours of operation without the catalyst but is allowed up to 200 hours per year.

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

COMPLIANCE DETERMINATION

Based on the scheduled inspection, N6150 Trendwell Vienna 31 CPF appears to be in compliance with PTI 708-96B and the Air Pollution Control Rules.



NAME _____

DATE _____

SUPERVISOR _____