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

N614265794

FACILITY: TRENDWELL ANTRIM INC - VIENNA 20		**SRN / ID:** N6142
LOCATION: SE NW NW T30N R1E SEC 20, 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 N6142, the Trendwell Vienna 20 Central Production Facility (CPF) for a scheduled inspection to determine compliance with PTI 700-96B. This is an opt out permit. This facility is located in Vienna Township, Montmorency County.

The Vienna 20 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 north on Matthews Road approximately 1 mile, the dirt access road will be on the east side of the road. It is the second of two adjacent roads. There is a gate which was open at the time of the inspection.

REGULATORY DISCUSSION

PTI 700-96B was issued 2/07/2012, voiding prior permit 700-96A. The permit was updated in 2012 to reflect replacing the previously permitted Caterpillar 3516LE with two engines – a Caterpillar 3512LE and Caterpillar 398 with catalytic control.

PTI 700-96A was issued 9/26/2007, voided 2/07/12.

PTI 700-96 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 east engine, is a Caterpillar 3512LE, identified as 902 on the skid and clipboard. The engine was operating at 1150 RPM and oil pressure 62 psi. The engine does not have a catalytic convertor. 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 40 feet which is greater than the 34.5 foot minimum height 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 west engine, is a Caterpillar 398NA, identified on the clipboard as Unit 944 and 3874 on the skid. The engine was operating at 1045 RPM. This engine has a catalytic converter. The inlet temperature to the catalytic convertor was 880 degrees Fahrenheit, while the outlet was 964 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 had a muffler and discharged unobstructed vertically upwards.

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.

The stack height was measured using the average of three hand-held range finder readings. The measured stack height was 40 feet which is greater than the minimum stack height of 34.5 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 400-barrel tank, one 200-barrel tank) are within the containment.

The glycol dehydrator is located outdoors. The unit was emitting steam, mild 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, NOx and CO emissions calculations, Maintenance logs, catalytic converter temperature logs and records of hours of operation with-out the catalytic converter.

EUENGINE2 had 64.5 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	20 tpy	13.76 tpy	EUENGINE1

Pollutant	Limit	Calculated Actual Emissions	Equipment
CO	13 tpy	7.09 tpy	EUENGINE1
NO_x	7 tpy	2.71 tpy	EUENGINE2
CO	14 tpy	5.85 tpy	EUENGINE2

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

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

COMPLIANCE DETERMINATION

Based on the scheduled inspection, N6142 Trendwell Vienna 20 CPF appears to be in compliance with PTI 700-96B and the Air Pollution Control Rules.

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