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

N790165609			
FACILITY: TRENDWELL ANTRIM INC - WOLF CREEK CPF		SRN / ID: N7901	
LOCATION: NW NE SEC 20, CALEDONIA TWP		DISTRICT: Gaylord	
CITY: CALEDONIA TWP		COUNTY: ALCONA	
CONTACT:		ACTIVITY DATE: 11/29/2022	
STAFF: Kurt Childs	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT: 2023 FCE.			
RESOLVED COMPLAINTS:			

# N7901 Trendwell Wolf Creek CPF 2023 FCE

On November 29, 2022, I traveled to N7901 Trendwell Wolf Creek CPF located in Caledonia Township, Alcona County for an unannounced scheduled inspection to determine compliance with PTI 349-07. This is an opt-out source.

# LOCATION

The source is located west of Hubbard Lake. From M-32, travel south on M-65, turn east onto Hubbard Lake Trail and follow approximately 7 miles. Turn left/north onto Yukon Rd (private road, many signs at entrance), follow 1-2 miles. The source is located next to a Riverside Energy Michigan facility (N8070). Trendwell Wolf Creek is the eastern CPF, which is the second facility on the access road.

# **EQUIPMENT ON SITE**

The facility previously housed 2 engines - a permitted Caterpillar 3306 engine with no control and a Caterpillar 3516, 1085 hp, lean burn engine. PTI 349-07 lists the engines as EUENGINE1 and EUENGINE2 but does not differentiate which is which. Each engine has different emission limits. In 2009 Trendwell submitted a PTI application to change the Caterpillar 3306 to a Caterpillar 3406 with catalytic convertor. The application was voided per Jeremy Hoeh in AQD Permits and the change could be accomplished under the flexibility of SC 2.8, which allows for change out of equivalent or lesser emitting engines. Trendwell sent a notification letter 8-18-09.

At the time of the inspection, only one engine was on-site. It was a large V-16 Caterpillar engine without a catalyst located in the main part of the compressor building. The Unit ID on the compressor skid was GCS 848 which matches previous AQD observations. It appears that an engine has been removed from a room on the east end of the compressor building. The stack was still there and conforms to the stack dimensions in the PTI for SVENGINE1. Based on the stack dimensions it appears the remaining engine is EUENGINE2, the CAT 3516LE. The engine that was removed must have been the CAT 3406 (with catalyst) which replaced EUENGINE1. Therefore, the emission limits applicable to EUENGINE2 are still applicable to this facility.

There is also a glycol dehydrator located outdoors, and a tank farm with 2 tanks under 400 bbl.

Next to the Trendwell facility is a Riverside CPF (N8070). During the permitted phase it was determined that the two CPFs operate independently from each other.

Additionally, even if the emissions from both sources were combined, they would not be a Title V facility. Therefore, the Riverside CPF and Trendwell Wolf Creek CPF are 2 separate sources.

Riverside sends its brine to the Trendwell facility for disposal.

# **REGULATORY DISCUSSION**

PTI 349-07 is for 2 engines and a dehy. As indicated above, only EUENGINE2 remains of the two engines.

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 dehy is subject to 40 CFR Part 63, Subpart HH, which also has not been delegated to EGLE from EPA.

### **INSPECTION NOTES**

During the inspection the Caterpillar 3516 engine was operating. No visible emissions or odors were noted.

The Caterpillar 3516 was operating at 1090 RPM and had engine oil pressure of 63 PSI.

No daily operating log sheets were present in the compressor building.

The stack for EUENGINE1 is required to have a minimum height of 42 feet and 4-inch maximum diameter, and EUENGINE2 a minimum height of 33 feet and 12 maximum diameter. As stated above, EUENGINE1 is gone but the stack matching those dimensions was still present. Measurements of the EUENGINE2 stack height using the average of three readings from a hand-held range finder verified the 33' minimum height.

A glycol dehydrator, a lined tank farm with 2 tanks under 400 bbl, and a brine injection well are located onsite. Several small storage tanks – used oil, engine oil are located inside the building.

The dehy was operating at the time of the inspection with only mild odors present. SC 1.2 states that "The permittee shall not operate EUDEHY unless the vapor recovery unit is installed, maintained, and operated in a satisfactory manner." At the time of the inspection there was no vapor recovery unit present. Vapors were being emitted directly to the atmosphere from a drip tank (see 3 attached photos).

# **RECORDS, SPECIAL CONDITIONS:**

Records were requested prior to the inspection and were provided on 11/23/2022.SC 2.6, 2.10, 2.11 - Emission Limits and throughputs:

Records indicate that EUENGINE1 was the Cat 3406, 215 hp. No emissions were reported in the past 12 month rolling time period. It was previously noted that this unit had not been used since 2010. EUENGINE1 has now been removed from the site.

# EUENGINE2 - Cat 3516, 1085 hp as follows:

Parameter:	EUENGINE2	
	Limit	Reported
NOx (tpy, 12 month rolling)	22	9.40
CO (tpy, 12 month rolling)	NA	7.23
Fuel (MMCF, 12 month rolling)	NA	27.9

September 2018. Emissions are under permitted I.

SC 2.2, 2.3, 2.4, 2.8, 2.9 - Maintenance and PM-MAP:

The facility has a recently approved MAP from 8/02/2022, approval letter dated 8-25-22. The engines are correctly listed in Appendix A of MAP. Records received were reviewed and meet conditions of MAP.

Records show EUENGINE1 did not operate in the past 12 months, therefore operated zero hours without the catalyst. The permit allows for 200 hours.

# SC 2.12a, 2.12b - Stacks:

The stack for EUENGINE1 is required to have a minimum height of 42 feet and maximum diameter of 4 inches. The stack for EUENGINE2 is required to have a minimum height of 33 feet and maximum diameter of 12 inches. Based on visual observations and range finder measurements during the site inspection, the stacks meet these conditions.

### MAERS

The 2021 MAERS report was not reviewed this year.

### **COMPLIANCE DETERMINATION**

Based on the scheduled inspection and records review, the facility appears to be in compliance with PTI 349-07 with the exception of SC 1.2 that requires glycol dehydrator emissions to be controlled by a vapor recovery unit.



Image 1(Dehy1) : Dehy from N.





Image 2(Dehy2) : Dehy from E.





Image 3(Dehy3) : Dehy from S.

NAME

DATE \_\_\_\_\_\_ SUPERVISOR\_