

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

FCE Summary Report

Facility : TRENDWELL ANTRIM INC - EAST ALBERT 16	SRN : N6149
Location : SE NW SE T29N R2E SEC 16	District : Gaylord
	County : MONTMORENCY
City : ALBERT TWP State: MI Zip Code : 49756	Compliance Status : Unknown
Source Class : SM OPT OUT	Staff : Becky Radulski
FCE Begin Date : 3/20/16	FCE Completion Date : 3/20/2017
Comments : fy17 schedule inspection and records review	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
03/20/2017	Scheduled Inspection	Compliance	FY17 scheduled sight inspection
03/20/2017	Other	Compliance	FY records review
03/08/2017	MAERS	Compliance	2016 MAERS, Check MAERS for any review comments

Name: Becky Radulski **Date:** 4/11/17 **Supervisor:** SN

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

N614938979

FACILITY: TRENDWELL ANTRIM INC - EAST ALBERT 16		SRN / ID: N6149
LOCATION: SE NW SE T29N R2E SEC 16, ALBERT TWP		DISTRICT: Gaylord
CITY: ALBERT TWP		COUNTY: MONTMORENCY
CONTACT: Danita Greene, Production and Environmental Compliance		ACTIVITY DATE: 03/20/2017
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY17 scheduled sight inspection		
RESOLVED COMPLAINTS:		

AQD Staff traveled to N6149 Trendwell Antrim Inc East Albert 16 CPF located in East Albert Township, Montmorency County, for a Full Compliance Evaluation (FCE) scheduled inspection to determine compliance with PTI 204-07. This is an opt out permit.

The East Albert 16 CPF is a natural gas central production facility (CPF). Natural gas and brine fluids are extracted from wells drilled into producing reservoirs (Antrim Formation). Fluids are transmitted through flow lines to the CPF. The gas is compressed and dehydrated prior to pipeline transport.

LOCATION

The facility is located about 5 miles east of Lewiston. To get to the facility, travel east of Lewiston on County Rd 612 to Avery Lake Rd. Travel north on Avery Lake Rd approximately 1.5 miles, the facility is on the east side. The site is fenced – the fence was open during the inspection.

The facility was signed as: Trendwell Antrim Inc; East Albert 16 CPF; SE/4 Section 16 T29N R2E; Albert Township; Montmorency County MI; Emergency: 517-731-1844; in no answer 616-754-5024.

A map to the facility has been attached to the permit file cover.

REGULATORY DISCUSSION

PTI 204-07 was issued October 4, 2007, active permit. The permit is for 2 lean burn engines (Caterpillar 3516LE 1,085 hp and Caterpillar 3516LE 1,265 hp) and one dehydration unit that processes Antrim zone natural gas (exempt per Rule 288(2)(b)(ii)); the PTI evaluation notes indicate exempt per Rule 282(b)(i)). The Caterpillar 3516LE 1,085 hp unit was removed in 2011.

PTI 707-96 permitted 11/22/96, VOID 7/21/98. The permit was void “because the requirement of 201(1) to obtain a permit to install no longer applies to this facility”.

PTI 204-07 is an opt out permit due to SC 2.8 of the permit which allows for replacement of the engine with an equivalent-emitting or lower-emitting engine. The replacement engine can be with or without control.

The facility is not major for HAPS.

The engine is subject to 40 CFR Part 63, Subpart ZZZZ, which has not been delegated to MDEQ from EPA.

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

INSPECTION NOTES

The facility contains 1 large building with a compressor engine, oil-water separator and dehy system, as well as a brine storage tank.

The permit is for 2 engines: a Caterpillar 3516LE 1,085 hp and a Caterpillar 3516LE 1,265 hp. The permit, evaluation notes and permit cards do not indicate which permitted engine is EUENGINE1 and EUENGINE2, respectively. Based on estimated emissions for a Cat 3516LE 1,085 hp engine, the limits

seem to fit for EUENGINE2; however the limits for EUENGINE1 are higher than anticipated for a Cat 3516LE 1,265 hp engine.

In MAERS, the engines are identified as follows:

EUENGINE1 – Caterpillar 3516LE 1,265 hp, Unit F1204

EUENGINE2 – Caterpillar 3516LE 1,085 hp, Unit F896 (removed 11/01/2011)

The two engines have the same stack requirements but different NOx and CO limits. The limits for EUENGINE 1 are higher.

As noted, only the Caterpillar 3516LE 1,265 hp, Unit 1204 remains at the facility. The building has empty space on the east side where the second engine had been located. The engine was operating during the inspection. The skid is labeled as GCS 1204. The maintenance clipboard the unit is named Unit 1204, Caterpillar 3516, and operational notes have been added daily.

No VE or odor was noted from the exhaust. The exhaust stack has a muffler.

During the inspection the unit was operating as follows:

RPM	1133
Engine Oil Pressure	53 psi
Engine Oil Temperature	184 F

Based on visual estimate, the stack appears to meet the height and diameter requirements (31.5 feet minimum height, 12 inch maximum diameter).

Inside the facility were several containers for used oil and engine oil.

The dehy is located outside the building. It was operating during the inspection. Steam was present, slight odor. A triethylene glycol tank (approximately 100 gallon) was located next to the dehy in containment.

Outside the facility was a lined containment area for a 400 bbl brine storage tank and smaller emulsion tank. A methanol drum was also outside in containment.

MAERS

The 2016 emissions will be reviewed separately. Any issues will be noted in MAERS and resolved separately.

MACES

MACES was reviewed. Updated the description to reflect only 1 engine. Updated Contact information to assign appropriate facility contact. Updated MACT screen to include Subparts HH.

COMPLIANCE DETERMINATION

Based on the scheduled inspection, N6149 Trendwell Antrim Inc East Albert 16 CPF appears to be in compliance with PTI 204-07. Records are reviewed separately.

NAME Becky Radulski DATE _____ SUPERVISOR SN

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Other

N614938980

FACILITY: TRENDWELL ANTRIM INC - EAST ALBERT 16		SRN / ID: N6149
LOCATION: SE NW SE T29N R2E SEC 16, ALBERT TWP		DISTRICT: Gaylord
CITY: ALBERT TWP		COUNTY: MONTMORENCY
CONTACT: Danita Greene , Production and Environmental Compliance		ACTIVITY DATE: 03/20/2017
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY records review		
RESOLVED COMPLAINTS:		

RECORDS REVIEW – N6149 TRENDWELL EAST ALBERT 16/2 CPF

Danita Greene (dgreene@trendwellenergy.com, 616-866-5024) provided records.

PTI 204-07, N6149 Trendwell East Albert CPF, permits for a dehy and 2 engines: a Caterpillar 3516LE 1,085 hp and a Caterpillar 3516LE 1,265 hp. The permit, evaluation notes and permit cards do not indicate which permitted engine is EUENGINE1 and EUENGINE2, respectively. Based on estimated emissions for a Cat 3516LE 1,085 hp engine, the limits seem to fit for EUENGINE2; however the limits for EUENGINE1 are higher than anticipated for a Cat 3516LE 1,265 hp engine. The two engines have the same stack requirements but different NOx and CO limits. The limits for EUENGINE 1 are higher.

In MAERS, the engines are identified as follows:

EUENGINE1 – Caterpillar 3516LE 1,265 hp, Unit F1204

EUENGINE2 – Caterpillar 3516LE 1,085 hp, Unit F896 (removed 11/01/2011)

Based on MAERS and estimated emissions, the above description of engines appears to be correct. As mentioned above, EUENGINE2, the Caterpillar 3516LE 1,085 hp engine, was removed in 2011.

EUENGINE1, Caterpillar 3516 LE, 1265 hp (Unit F-1204)

EUDEHY

Conditions of the EUDEHY table are related to 40 CFR Part 63, Subpart HHH, which has not been delegated to the state of Michigan for area sources.

FGENGINES

EUENGINE1 – Caterpillar 3516LE 1,265 hp, Unit F1204

EUENGINE2 – Caterpillar 3516LE 1,085 hp, Unit F896 (removed 11/01/2011)

SC 2.1a, 2.11 - limits the NOx for EUENGINE1 to 49.4 tpy, based on 12 month rolling. The facility provided records. As of February 2017, the reported 12 month rolling for NOx was 31.36 tpy, which is under the permitted limit.

SC 2.1b, 2.12 - limits the CO for EUENGINE1 to 23.2 tpy, based on 12 month rolling. The facility provided records – as of February 2017, the reported 12 month rolling for CO was 15.33 tpy, which is under the permitted limit.

SC 2.2, 2.8 - requires the facility to submit and maintain a Malfunction Abatement Plant (MAP). The facility has an approved MAP from 2016. The engine does not have control. Records were provided as requested.

SC 2.3, 2.4, 2.9 – requires that engines with add on control have the control be installed, maintained and operated properly, and that the engine does not operate more than 200 hours per year without control. The existing engine does not have add on control, therefore these conditions do not currently apply.

SC 2.5 - requires verification of NOx and CO emission rates upon request from AQD. AQD has not made the request to test at this time.

SC 2.6, 2.10 - requires the facility meter natural gas usage and provide monthly fuel use upon request. Records were provided. In February 2017, throughput was 3,881 MCF/month, and 61,277 MCF/12 month rolling. June-July 2016 had the most production in the past 12 months.

SC 2.7 - requires all calculations completed and made available. The facility provided records the same day they were requested, and meets this condition.

SC 2.8 - allows for engine switch out to an equal or lesser emitting engine, with notification to the AQD of the change. No notifications have been received.

2.13 stack - requires SVENGINE1 to have a minimum height of 31.5 feet and maximum diameter of 12 inches. Based on visual estimates during the inspection, the stack meets this condition.

COMPLIANCE DETERMINATION

Based on the records review, N6149 Trendwell East Albert CPF appears to be in compliance with PTI 204-07.

NAME Becky Radulski

DATE 4/11/17

SUPERVISOR SN