

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

N019961584

FACILITY: Lambda Energy Resources LLC - Springdale 25		SRN / ID: N0199
LOCATION: 17863 Plagany Rd, COPEMISH		DISTRICT: Cadillac
CITY: COPEMISH		COUNTY: MANISTEE
CONTACT: Vicki Kniss , Environmental Affairs Manager		ACTIVITY DATE: 01/20/2022
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: 2022 FCE.		
RESOLVED COMPLAINTS:		

2022 Full Compliance Evaluation

I Conducted a Full Compliance Evaluation (FCE) of this facility to determine compliance with the Air Pollution Control Rules and PTI 49-04B. At the time of the inspection the weather was overcast, 16 degrees F with calm winds. I did not detect any odors outside of buildings or observe any visible emissions.

The facility is equipped with a flare, there was no visible flame and no visible plume or opacity. A Lambda Energy plant operator was on-site at the time of the inspection and stated that the pilot flame was out due to frozen lines. The flare serves as a back-up control to the Dehy, relief valves, and tank vapor recovery unit. Therefore, if there were a need to vent this process equipment, the vented gas would not be controlled by the flare. The plant operator stated that they would probably begin fixing the problem on the following day. Special Condition EUSD25DEHY IV.2. of PTI 49-04B requires that EUSD25DEHY not operate unless a pollution device, including a flare, is installed, maintained, and operated in a satisfactory manner. EUSD25DEHY is controlled by collecting the vapors and routing them to the compressor engine. So the intent of the condition is likely met though the back-up control of emissions via the flare was not available. I relayed information regarding malfunction of the flare to Mr. Nick Summerland at Lambda Energy.

There were three process heaters (two operating) and 4 four tanks, 2 containing production water, and 2 crude oil. There was one dehydrator that was operating at the time of the inspection. Gas sweetening plant equipment has been removed and replaced with an H2S scavenger system utilizing a scavenger fluid identified as MEA Triazine on the tank label.

At the time of the inspection there was also one V-12 Waukesha Compressor engine on-site and operating. The engine was equipped with a catalytic converter and AFRC. Operating data was as follows:

Compressor Engine Operating Data	
Parameter	Reading
Unit Number	202
RPM	813 rpm. (direct reading, note on panel states to add 75 rpm to this reading)
Oil Pressure	30 psi
CC Diff. Press.	NA
CC Inlet Temp.	909
CC Outlet Temp.	926
AFRC 02 L	.798V
AFRC 02 R	.799V
AFRC Stepper pos. L.	1448

AFRC Stepper Pos. R. 1556

Each reading was within permit limits or consistent with normal operation. The catalytic converter is equipped with tubing and fittings for a differential pressure reading but a gauge is not permanently attached.

Facility records were requested prior to the inspection. The records provided indicate that the plant was shut in from March 30, 2020, to April 18, 2021. This shut down affects the 12-month rolling time period data with apparent reductions in the 12-month emission calculations as follows:

12-mos rolling average NOx emissions were 2.20 tons, the NOx limit is 9.4 tons

12-mos CO emissions were 3.03 tons, the CO limit is 17.4 tons.

The compressor engine did not operate without the add-on control device (catalytic converter).

The catalytic converter appeared to be installed and operating properly.

Gas analysis shows that H2S concentrations were non-detectable at the dehydrator inlet.

Compressor engine natural gas usage is monitored and recorded; records indicate usage for the 12-month rolling period ending in October 2021 was 9.2 MMcf.

A log of maintenance activities is maintained and was provided (see attached). Maintenance was due to one service for Quad Z due to the shut-in.

The dehy is potentially subject to 40 CFR 63 Subpart HH but may be exempt because natural gas flowrate to the dehy is less than 85,000 cubic meters per day OR benzene emissions are less than 0.90 Mg/yr. The Springfield 25 is an area source of HAP so no further review of Subpart HH compliance was conducted.

The compressor stack appears to meet the 10' max. diameter and 25' min. height requirement.

In accordance with PTI 49-04B there has been no reporting for this facility since the 4th quarter of 2008 since the sweetening plant was shut down in October 2008. The sweetening plant has been shut down but has not been completely separated from FG FACILITY since a vessel from the sweetening plant is being used for the H2S scavenging process.

A soil remediation air sparge system was also observed on site and is located in a separate dark green building. It did not appear to be operating at the time of the inspection.

Based on this Full Compliance Evaluation it appears that N1099 is currently in compliance with PTI 49-04B and the Air Pollution Control Rules.

NAME 

DATE _____

SUPERVISOR _____