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

B914454233

FACILITY: Lambda Energy Resources, LLC - Charlton 4		**SRN / ID:** B9144
LOCATION: 5750 LOST CABIN TR, JOHANNESBURG		**DISTRICT:** Gaylord
CITY: JOHANNESBURG		**COUNTY:** OTSEGO
CONTACT:		**ACTIVITY DATE:** 07/13/2020
STAFF: Bill Rogers	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Inspection for FCE		
RESOLVED COMPLAINTS:		

On September 18, 2019, I inspected the Lambda Charlton 4 CPF. This facility is in the Pigeon River State Forest. The nearest paved road is Sparr Road, to the south. There is no special difficulty in reaching the facility; it is directly adjacent to a public gravel road.

The facility is of an unusual layout. A large fenced area visible from the road contains storage tanks, sheds, and various process heaters. The compressor shed is outside the fenced area, out of sight up a hill to the south. The dehydrator shed is further south, inside a small separate fenced area, visible from the compressor shed.

This facility is covered by Air Use Permit 52-04A, issued April 24, 2007. The permit references two emission units; EUCH4DEHY, a glycol dehydrator, and EUCH4COMP1, a natural gas-fired reciprocating compressor engine. It references one flexible group, FGFACILITY, which includes everything at the facility.

EUDEHY

Condition 1.1 requires the dehydrator be vented to a condenser, flare, or equivalent. Condition 1.2 requires that the condenser be installed and operating properly. The dehydrator appeared to have a condenser. It was installed and appeared to be operating properly. This complies with the permit conditions.

Condition 1.4a sets stack dimensions for the glycol dehydrator as a maximum stack diameter of four inches at a minimum height above ground level of 15 feet. The burner stack of the dehydrator appeared to meet the permit condition. The permit does not seem to mention the still vent, which is a separate, smaller diameter stack.

The dehydrator was operating at the time of my inspection, based on the heat shimmer from the burner stack. There was no opacity and no odor. The condenser on the still vent is a wide device in the still vent exhaust path, angling downward from a point above the dehydrator to the edge of the dehy shed, with the final still vent going upward from there. There was no opacity, not even "steam," from the still vent. I estimated the still vent dimensions as two inches diameter, 20 feet above ground level, unobstructed vertically upward.

I could tell the dehy burner was operating, but I could not see any "steam" from the still vent. I didn't smell any odors in the area.

EUCH4COMP1

One compressor engine is listed in this permit. There is one on site. There is an empty pad for a second one, but the second engine seems to have been gone for a long time.

Condition 2.3 requires that the add on control device be installed and operating properly. I did not see the catalytic oxidizer during this inspection. There was a roll of some insulating material wrapped around the area of the exhaust pipe where I would expect a catalytic oxidizer to be; it could have been under there. The company claims there is a catalytic oxidizer and submitted maintenance records for it..

Condition 2.10a sets stack dimensions of a minimum height of 20 feet above ground and a maximum diameter of 10 inches. The stack appears to meet these conditions.

The engine was running at the time of my inspection. The engine is a small to medium sized natural gas-fired spark ignition engine. According to its instrument panel it was running at 890 RPM. Engine oil pressure was 40 (psi, I presume), compressor oil pressure was 50, engine water temperature 150 degrees, engine oil temperature 190 degrees, compressor oil temperature 155 degrees.

The exhaust pipe leaves the shed horizontally to a horizontal muffler, then is directed unobstructed vertically upward through a pipe elbow. There was no opacity. I didn't notice any odors there.

FGFACILITY:

Condition 3.2 requires burning only sweet natural gas at the facility. I did not see or smell anything that would lead me to think any sour gas was being used.

COMMENTS

This is a large facility, but much of it seems to have fallen out of use. It is one of the older facilities and paint is weathered, but maintenance on such equipment as was operating appeared to be good.

Equipment not listed in any of the permit conditions included several tanks.

In the large fenced area there are five 400 barrel oil field storage tanks. One is labeled as produced water and the other four as crude oil. They appear to have been freshly painted. There is a truck loadout pad nearby. The tanks are inside a berm that appears to be lined.

I saw two drum on stilts tanks inside the compressor shed, one labeled as Delo SAE 40 Oil and the other Chevron Regal R&O ISO 150. There was a second set of similar tanks near the empty engine pad north of the operating engine, where I believe there was a second engine once. There was a drum on stilts methanol tank over a lined wooden berm structure outside near the compressor shed.

I didn't notice any triethylene glycol tanks near the dehydrator. There was another 300 gallon drum on stilts tank, labeled methanol, over a wooden berm structure, near the dehy shed.

There are six large process heaters. They are not so large that I believe they would need to be permitted, although I didn't see any builder's plates to tell me their heat input capacity. Two were operating at the time of my inspection, based on heat shimmer from their burner stacks. North to south I estimated the stacks as (1) 12 inches diameter by 24 feet high, (1) 16 inches diameter by 20 feet high, and (4) 24 inches by 15 feet high, but this was just judging by eye and therefore not likely very accurate.

I didn't notice any odors or opacity during my inspection. I didn't see any leaks or spills. I didn't see any stained soils which would indicate leaks or spills in the recent past.

I didn't see any leaks. I didn't see any stained soils which would make me think there had been any recent leaks or spills.

NAME _____ DATE _____ SUPERVISOR _____

William J. Rogers Jr. Digitally signed by William J. Rogers Jr. Date: 2020.08.12 13:21:33 -04'00'

Shane Nixon Digitally signed by Shane Nixon Date: 2020.08.12 13:23:13 -04'00'