

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

B915269622

<b>FACILITY:</b> Lambda Energy Resources LLC - Hayes 22		<b>SRN / ID:</b> B9152
<b>LOCATION:</b> 9375 MT FREDERIC RD, GAYLORD		<b>DISTRICT:</b> Gaylord
<b>CITY:</b> GAYLORD		<b>COUNTY:</b> OTSEGO
<b>CONTACT:</b>		<b>ACTIVITY DATE:</b> 10/06/2023
<b>STAFF:</b> David Bowman	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> scheduled inspection for FY 24		
<b>RESOLVED COMPLAINTS:</b>		

On 6 October 2023 I, David Bowman MI EGLE AQD, conducted a site inspection for B9152 Lambda Energy Resources – Hayes 22, operating under the conditions of permit to install (PTI) 653-96B. As part of the inspection, I reviewed the malfunction abatement plan (MAP that is on file in the gaylord office to ensure the site is complying with the MAP requirements.

The site address is 9375 Mt Frederick rd, Gaylord. The GPS takes you to the address. It is easily seen from Mt Frederick Rd.

The weather was partly sunny and windy. 71°F, 42% humidity, 13.9 psi pressure. At the gate I recorded the following data from the Atmo Tube:

PM1.0 µg/M <sup>3</sup>	PM 2.5 µg/M <sup>3</sup>	PM 10 µg/M <sup>3</sup>	VOC PPM
2.2	4.0	5.9	0.00

The site was operating and there were no discernable odors nor any visible signs of spills or problems on the grounds.

Emission Units (EU) associated with PTI 53-04A:

Emission Unit	Description	Stack
EU-HY22DEHY	glycol dehydrator	SVDEHY
EUENGINE1	natural gas fired engine	SVENGINE1

Flexible Groups (FG) associated with PTI 53-04A:

Emission Unit	Description	Stack

<b>FGTANKS</b>	<b>Four x 400 barrel (bbl) crude oil tanks equipped with vapor recovery unit (VRU) and one x 210 bbl crude oil tank</b>	<b>NA</b>
<b>FGFACILITY</b>	<b>All process equipment</b>	<b>NA</b>

## EU-HY22DEHY

### 1.1 Shall not operate EU-HY22DEHY unless the flash tank is installed...

Discussion – I observed a flash tank piped into the dehy and it appeared to be working properly and maintained.

### 1.6

Stack and vent ID	Max Diameter	Estimated diameter	Minimum height above ground	Estimated height above ground
SVDEHY	8"	8"	14'	15'

Stack height is estimated using the Nikon Forestry Pro laser range finder.

At EU-HY22DEHY stack I recorded the following data from the Atmo Tube:

PM1.0 $\mu\text{g}/\text{M}^3$	PM 2.5 $\mu\text{g}/\text{M}^3$	PM 10 $\mu\text{g}/\text{M}^3$	VOC PPM
1.0	2.1	3.2	0.00

There were no odors nor any visible emissions from stack.

## EUENGINE1

### 2.1 Permittee is required to submit MAP...

Discussion – The MAP on file in the Gaylord AQD office is dated 15 January 2009 and is from Merit Energy, the previous site operator to Lambda. Lambda is creating an updated MAP for submission due to personnel changes that have occurred since acquisition of the facility from Merit. Once that MAP is submitted a MACES entry is going to be made.

The daily check sheet used by the site operator captures the required information from the MAP. At the time of inspection, the operating parameters were within the range specified in the MAP. O2 sensor mV 86/86; inlet temp 786°F and outlet temp 856°F; engine oil PSI 41, 772 RPM;

and coolant temp was 150°F. the engine is equipped with an air fuel ration controller (AFRC) and it was operating at the time of inspection.

2.3 require the catalyst to be installed, operating, and maintained...

Discussion – Catalyst was present and data display indicated proper operation per the MAP requirements.

#### 2.11a

Stack and vent ID	Max Diameter	Estimated diameter	Minimum height above ground	Estimated height above ground
SVENGINE1	10.0"	10"	25'	25'

Stack height is estimated using the Nikon Forestry Pro laser range finder.

At EUENGINE1 stack I recorded the following data from the Atmo Tube:

PM1.0 $\mu\text{g}/\text{M}^3$	PM 2.5 $\mu\text{g}/\text{M}^3$	PM 10 $\mu\text{g}/\text{M}^3$	VOC PPM
1.0	2.1	3.2	0.00

There were no odors nor any visible emissions from stack.

#### FGTANKS

3.1 Permittee shall not operate FGTANKS unless the VRU control is installed, maintained, ...

Discussion – the VRU was visibly connected to the tanks. Two of the 400 bbl tanks are in process of being replaced and are not connected to the system yet but have been placed inside the berm. There are two more 400 bbl tanks staged near the berm. The 210 bbl tank is present and appears to be in the VRU piping system.

At the tank battery I recorded the following data from the Atmo Tube:

PM1.0 $\mu\text{g}/\text{M}^3$	PM 2.5 $\mu\text{g}/\text{M}^3$	PM 10 $\mu\text{g}/\text{M}^3$	VOC PPM
2.0	3.2	5.0	0.00

#### FGFACILITY

**4.2 shall only burn sweet gas...**

**Discussion – there are two iron sponges on the gas inlet side of the piping. These would be used to remove small amounts of hydrogen sulfide from the gas stream. The permit allows for the removal of the hydrogen sulfide by the iron sponges. There were no odors onsite to indicate that any sour gas is being processed or burned. The iron sponges appeared to be operational and maintained.**

**There are six heater/treaters one had the stack removed and appeared to be out of service. There was only one that I could hear flow through.**

**At the area of the heater/treaters I recorded the following data from the Atmo Tube:**

<b>PM1.0 µg/M<sup>3</sup></b>	<b>PM 2.5 µg/M<sup>3</sup></b>	<b>PM 10 µg/M<sup>3</sup></b>	<b>VOC PPM</b>
<b>2.0</b>	<b>3.1</b>	<b>4.3</b>	<b>0.00</b>

**There were no odors nor any visible emissions from the stacks of the devices.**

**There were no indications of spills on the site. The site appears to be well maintained and there are upgrades being made as reported in FGTANKS. This should not trigger any need for a new PTI due to like for like change and the condition of VRU still being able to be met.**

NAME 

DATE 11-20-23

SUPERVISOR 