

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

N807449057

FACILITY: Lambda Energy Resources, LLC - Blue Spruce		SRN / ID: N8074
LOCATION: SW SE NE, T28N-R8E, Section 8, CALEDONIA TWP		DISTRICT: Gaylord
CITY: CALEDONIA TWP		COUNTY: ALCONA
CONTACT: Vicki Kniss, Environmental Affairs Manager		ACTIVITY DATE: 05/30/2019
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection and record review for FCE		
RESOLVED COMPLAINTS:		

On May 30, 2019, I conducted a scheduled inspection of the Blue Spruce CPF. Earlier, Vicki Kniss of Lambda Energy sent me records to review. The inspection and records review were to show compliance with State Air Quality regulations and the facility permit, PI 199-08A.

Permit 199-08A, Table EUDEHY. Glycol dehydrator processing Antrim formation gas.

This table requires compliance with the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart HH. The United States EPA has not delegated enforcement of this standard to the AQD. I did, however, look at the dehy while I was on site. It appears unchanged from earlier inspections. In the past it had shown exemption from the more stringent pollution control requirements of Subpart HH by calculating that benzene emissions are less than the exemption limit, which is about one ton per year.

**Table EUENGINE**

Conditions I.1 and I.2 limit NOx to 9 tons per year and CO to 13 tons per year, based on a 12 month rolling total. The facility emission estimate, attached, claims 2.52 tons NOx and 5.50 tons CO per 12 month rolling time period. This complies with the permit condition.

Condition II.1 limits natural gas use to 29.2 million cubic feet per 12 month period. The facility emission estimate, attached, claims 21.4 million cubic feet were burned per 12 month period. This complies with the permit condition.

Condition III.1 requires a Malfunction Abatement Plan. The company submitted one. AQD approved it March 9, 2011.

Condition III.2 limits the facility to 200 hours of operation without its catalytic oxidizer per year. The company claims the facility did not operate without its catalytic oxidizer within the last year.

Condition IV.1 requires the catalytic oxidizer be installed and operating properly. During my inspection it appeared to be installed and operating properly, in compliance with the permit condition.

Condition IV.2 requires a natural gas usage gauge to continuously monitor fuel use. Condition VI.2 requires monitoring and recording fuel use. I did not find the fuel measuring device during my inspection. However, the attached emission estimate sheet includes fuel use, which implies that fuel use is being monitored and recorded.

Condition VI.3 requires a maintenance log. A copy of a page of the log is attached.

Condition VI.4 requires recording hours of operation without the add on control device. There is a form for this in the records submitted by the company, attached. It is blank but the company claims they have not operated without the catalytic oxidizer, so this may be correct.

Conditions VI.5, 6, and 7 require monthly and 12 month records for fuel use, NOx emissions, and CO emissions. These are included on the emission estimate sheet, attached.

Condition VIII.1 sets stack dimensions as a maximum diameter of 12 inches and a minimum height of 30 feet. The stack appeared to comply with these dimensions.

#### COMMENTS

The facility is easily reached from the public road. It is visible from the road although there is a berm which partially obscures it.

I did not see any opacity from any source at the facility. I did not notice any unusual odors. I did not notice any unusual vibration. I did not see any leaks, or any stained soils which might indicate earlier spills or leaks.

The facility includes a glycol dehydrator. I did not see any builder's plate on the burner of the dehydrator, so I didn't note its heat output, but it is similar in appearance to burners at other facilities in the 100,000 to 150,000 BTU per hour range. The dehydrator vent stack was about 1 1/2 inches diameter at 20 feet height, terminating in a T shaped pipe fitting which serves as a stack cap. The burner vent is about 6 inches diameter and 20 feet high, covered with a flat cap.

The facility includes one Caterpillar natural gas fired compressor engine with catalytic oxidizer. The engine is labeled with metal characters welded to the engine mount; they read 461206.

According to records on a clipboard at the control panel, catalyst inlet temperature was 830 degrees f and outlet 922 degrees f. A temperature rise across a catalytic oxidizer indicates pollutants are burning up inside it, which in turn suggests that it is operating properly. I saw what I believe to be the catalyst temperature readout, showing "point 2," probably the outlet temperature; it read 911 degrees f at the time of my inspection.

According to the control panel the engine was operating at 889 RPM. Engine oil temperature was about 190 degrees f. Engine coolant temperature 175 degrees f. Compressor oil temperature 175 degrees f. Engine oil pressure 70 psi. Compressor oil pressure 75 psi.

Outside the facility shed I saw three 400-barrel storage tanks inside a lined berm. One was unlabeled, two were labeled as "brine water." Just outside the shed wall near the glycol dehydrator I saw three drum on stilt style tanks over lined wooden berm structures. One, of the standard 300 gallon size, was labeled triethylene glycol. A second, larger than 300 gallons, was labeled meghyl alcohol. The third tank, also larger than 300 gallons, was not labeled. But it also didn't seem to have tubing leading from it to any of the equipment on site.

Inside the facility shed I saw two 300 gallon drum on stilt tanks, one labeled as Chevron HDAX low ash gas engine oil and one as Chevron ISO 100 R&O Oil.

The facility sign read Lambda Energy Resources LLC / Blue Spruce Central Production Facility / SE NE SEC 8 - T28N - RR8E / Alcona County / Emergency # 1-800-328-7430.

Maintenance appeared to be adequate.

NAME William J Rogers Jr

DATE 6/5/19

SUPERVISOR SN