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

FACILITY: RIVERSIDE ENERGY MICHIGAN, LLC - BRUSH LIMBAUGH		SRN / ID: N8255
LOCATION: BRUSH LIMBAUGH CPF, HILLMAN		DISTRICT: Gaylord
CITY: HILLMAN		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 09/09/2016
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Minor source insp	ection	
RESOLVED COMPLAINTS:		

On September 9, 2016, I inspected the Brush Limbaugh CPF, off of Brush Creek Truck Trail near Hillman. I found no violations at the site.

The facility formerly belonged to Chevron. The new name is in our database correctly. Latitude and longitude in our database are correct.

Our files contain Potential to Emit calculations showing that this facility is a true minor source.

Permit 79-09, Table EUDEHY, Condition VI.1(b), states that the operator may demonstrate exemption from the more stringent pollution control requirements of 40 CFR 63, Subpart HH, by demonstrating that gas throughput to the dehydrator is less than 85,000 standard cubic meters per day. A table, attached, shows that average daily throughput is 13,101 standard cubic meters per day. This is sufficient to show the facility qualifies for the exemption.

Table EUENGINE, Conditions I.1 and I.2 set a NOx limit of 8.2 tons and CO of 16.2 tons, both per 12 month rolling time period. Catalyst emissions test data, attached, indicate pre-control emissions of 13.31 tons NOx and 26.84 tons CO, post control 0.84 tons per year NOx and 3.60 tons per year CO. This complies with the permit condition, so long as the catalyst operates properly. Catalyst temperature data, attached, indicates the catalyst is probably operating properly.

Condition III.1 requires a Malfunction Abatement Plan. A copy of the plan and of AQD's approval letter for the plan are attached.

Condition VIII.1 sets maximum stack diameter for the engine as 12 inches, minimum height as 37 feet. The stack appeared to meet these conditions.

When I arrived on site, I paced out the length of the stack shadow in comparison with the length of my own shadow. Using this method I estimated the stack height as 36 feet plus another foot or two, which would meet the permit requirement.

The facility contains one medium sized Caterpillar compressor engine with catalytic oxidizer. It is labeled as GCS 876 with metal characters welded to the engine mount. According to the instrument panel it was operating at 909 RPM. Engine oil pressure was 60 psi, engine water temperature was 180 degrees f, compressor oil pressure was 80 PSI.

Using our remote thermometer I read temperatures on the exhaust pipe as 606 degrees f at the inlet of the catalyst, 637 at the outlet. This shows a rise in temperature across the catalyst, indicating it is probably working. Data from the built-in thermometers, attached, also shows a temperature rise across the catalyst.

There is a glycol dehydrator. It has a Wenco flame arrested burner rated at 200,000 btu/hr according to its builder's plate. Burner stack is about 6 inches diameter by 20 feet high. I couldn't see the still vent, so it was probably above the roof of the shed, which would put it at over 16 feet above ground minimum. I didn't smell any odors near the dehy.

Small tanks included two 300-gallon drum on stilt tanks over wooden berm structures near the dehydrator outside the compressor shed; one was labeled triethylene glycol, one was labeled methanol. Inside the shed I saw two 300 gallon drum on stilt tanks, one labeled as HDAX ashless gas engine oil, one as Chevron AIO ISO 100 oil. There were two orange-painted cylindrical tanks on the floor inside the shed labeled as used oil tanks.

The facility includes one 400 barrel brine tank inside a ligned berm.

I didn't see any stained soils which might indicate leaks or spills. I didn't notice any leaks or odors. Maintenance appeared good.

NAME William JRigers L. DATE 9/14/16

SUPERVISOR