

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

N825630399

FACILITY: CHEVRON MICHIGAN, LLC - LLOYDS OF LONDON CPF	SRN / ID: N8256
LOCATION: SE NW NE SEC 18 T31N R3E, HILLMAN	DISTRICT: Gaylord
CITY: HILLMAN	COUNTY: MONTMORENCY
CONTACT:	ACTIVITY DATE: 07/24/2015
STAFF: Bill Rogers	SOURCE CLASS: SM OPT OUT
SUBJECT: Compliance inspection and record review	
RESOLVED COMPLAINTS:	

On July 24, 2015, I inspected the Lloyds of London CPF. Natalie Schrader of Chevron had supplied me with records for this facility in response to my earlier email request.

Permit 84-09B, glycol dehydrator table EUDEHY, Condition VI.1(a) and (b) allow showing exemption from the enhanced emission control requirements of 40 CFR 63 Subpart HH by measuring and recording throughput, demonstrating that the dehydrator processes less than 85,000 cubic meters (approximately 3,002 MCF) of gas per day. Production records for the facility for April 2015 are attached. The highest production indicated is 654 MCF on April 17. Assuming all this gas went through the dehydrator (which is likely) the amount of gas processed was well under 3,002 MCF per day. This shows compliance with the permit condition.

Table EUENGINE, Condition I.1, sets a NOx emission limit of 20 tons per 12 month rolling time period. Emissions and fuel data, attached, indicate emissions of NOx after control as 1.53 tons per 12 month rolling time period as of April 2015. This complies with the emission limit.

Condition I.2 sets a CO emission limit of 30 tons per 12 month rolling time period. Emissions and fuel data, attached, indicate emissions of CO after control as 3.68 tons per 12 month rolling time period as of April 2015. This complies with the emission limit.

Note that the emissions data is marked as for Chief Creek CPF, but the engine unit listed is Unit 7573, the engine listed on the other spreadsheets as the one installed at Lloyds of London CPF.

Condition III.1 requires a Malfunction Abatement Plan. AQD has an approved Malfunction Abatement Plan on file.

Condition III.2 requires not operating without the add-on control device more than 200 hours per year. Maintenance and operating information, sample sheets from the year's worth provided attached, do not indicate any time operating without the catalytic oxidizer.

Condition IV.1 requires the add-on control device be installed and operating properly. The catalytic oxidizer was installed. Based on its input and output temperatures, it appeared to be operating properly. A sheet showing input and output temperatures, with the output consistently higher than input, is attached.

Condition V.1 requires verification of CO and NOx emission factors upon request by AQD. AQD did not request this, but the permittee ran a non-certified engineering test to verify catalyst operation. The test included finding emissions factors. Results are attached.

Condition VI.2 requires recording natural gas usage for EUENGINE. An example sheet of this data is attached.

Condition VI.3 requires recording maintenance data. A maintenance log is attached.

Condition VI.4 requires keeping track of hours of operation without the add-on control device. Operating data provided (a sample sheet of which is attached) did not indicate any time operating without the catalytic oxidizer over the year.

Condition VI.5 requires keeping records of fuel use for EUENGINE. An example data sheet of this is attached.

Condition VI.6 requires calculating monthly and 12-month NOx emissions for EUENGINE. A data sheet showing the required results is attached.

Condition VI.7 requires calculating monthly and 12 month CO emissions for EUENGINE. A data sheet showing the required results is attached.

Condition VIII.1 requires an engine stack with a maximum diameter of 12 inches and a minimum height of 36 feet. The stack was of about 12 inches diameter. I estimated its height as about 38 feet based on the ratio of the length of its shadow to my own.

Table FGFACILITY, condition II.1 prohibits burning sour gas on site. There was no evidence of sour gas being processed at the facility.

Comments:

The facility is off Brush Creek Truck Trail between Hillman and Atlanta.

The facility includes one 400-barrel size tank which appears to be a brine tank. It was inside a well maintained lined berm. It was piped to a well labeled as Chevron Michigan LLC / 231-995-4000, 989-705-7665 / Lloyd's of London / St Hillman A 3-18 SWD / Permit # 51602, T31N R3E Sec 18 SW 1/4 NW 1/4 NE 1/4, Hillman Twp Montmorency Co.

The engine data recording sheet indicated pre-catalyst temperature was 855.9 and post 934.7 degrees f this day. The pre-catalyst temperature was visible on the engine instrument panel and was 855 degrees at the time I saw it. The engine was marked as Unit CO 7573. Its control box indicated the AFRC was operating. The engine was running at 1048 RPM, oil pressure 70 PSI, engine coolant temperature 200 degrees f, compressor oil pressure 50 PSI.

There were two 300 gallon drum on stilt tanks for lubricating oil. There was a larger orange drum-shaped tank labeled as waste oil. Outside the building I saw an oval metal coolant tank near the engine radiator.

The glycol dehydrator had a Wenco flame arrested burner rated at 200,000 BTU. The burner stack appeared to be 6 inches diameter and about 24 feet high, exhausting unobstructed vertically upward. The still vent was on top of the compressor shed at about 24 feet height also, but I couldn't see it well. It had a wisp of "steam" coming from it.

There was a barely detectable glycol odor near the dehy.

There were two 300 gallon drum on stilt tanks near the dehy, over a berm structure. One was labeled as triethylene glycol and the other as methyl alcohol.

Other than the glycol odor and "steam" noted above, I did not notice any odors or opacity. I did not see any stained soils. Maintenance appeared to be good.

I observed clear liquid dripping from a pipe near the dehydrator, inside the compressor shed. It appeared to be condensation but I notified Chevron of it anyway. Later their field supervisor confirmed that this was condensation, caused by temperature drop from a pressure drop in the gas as it entered the pipe.

NAME William J Rogers Jr DATE 7/30/2015 SUPERVISOR AB