

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

P001430682

FACILITY: CHEVRON MICHIGAN, LLC - ELVIRA 11 PHASE 2 CPF		SRN / ID: P0014
LOCATION: Elmira Township, Section 17, ELMIRA TWP		DISTRICT: Gaylord
CITY: ELMIRA TWP		COUNTY: OTSEGO
CONTACT: Natalie Schrader ,		ACTIVITY DATE: 08/14/2015
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection and record review		
RESOLVED COMPLAINTS:		

On August 14, 2015, I inspected the Elvira 11 Phase 2 CPF. The facility is located in Section 17 (not 11) of Elmira (not Elvira) Township. It may be reached by a driveway heading north from Parmater Road west of Camp 10 Road.

Permit 279-09, Table EUDEHY, Condition VI.1, provides two means of showing exemption from the more stringent pollution control requirements of the Glycol Dehydrator MACT, 40 CFR 63 Subpart HH. One of these ways is to show that actual annual average flow rate of natural gas through the dehydrator is less than 85,000 cubic meters per day (about 3 million cubic feet per day). Condition VI.2 requires measuring gas flow through the dehydrator each day if they choose this means of showing they meet the exemption. The company provided production data for this facility for one year to show compliance with this requirement. A typical sheet is attached. It shows the company recording gas throughput each day. The highest daily production in April 2014 was 725 thousand cubic feet. The data for the rest of the year didn't show anything significantly higher. This is sufficient to show that the facility meets exemption from the more stringent pollution control requirements of Subpart HH.

Table EUENGINE, Condition I.1, sets a NOx limit of 10 tons per 12 month rolling time period. Emissions calculations, attached, show maximum emissions of about 5.4 tons per 12 month rolling time period.

Condition I.2 sets a CO limit of 20 tons per 12 month rolling time period. Emissions calculations, attached, show maximum emissions of about 2.6 tons per 12 month rolling time period.

Condition III.1 requires a Malfunction Abatement Plan. The AQD received a MAP for this site and approved it on July 8, 2010.

The engine is equipped with a catalytic oxidizer. Condition IV.1 requires any add on control device to be installed and operating properly. During my inspection it appeared the catalytic oxidizer complied with this condition. The operator is recording catalyst inlet and outlet temperatures each day. A data sheet, attached, indicates temperature consistently rises across the catalytic oxidizer, indicating it is burning pollutants from the air, which suggests it is operating properly. According to a data sheet on a clipboard in the facility, inlet and outlet temperatures the day of my inspection were 1002 degrees f in and 1045 degrees f out. I also took temperatures of the exhaust pipe before and after the catalytic oxidizer using AQD's remote thermometer. The inlet was 728 degrees f and outlet was 734 degrees f (on the outside of the pipe of course, company values are measured by thermocouples inside the catalytic oxidizer and therefore are higher). However, I thought I was getting too much variation in the remote thermometer readings to put too much faith in them.

Condition VI.2 requires monitoring and recording natural gas usage in the engine. Data showing fuel consumption is attached.

Condition VI.3 requires a maintenance log. Sample maintenance records are attached.

Condition VI.4 requires recording hours of operation without the catalytic oxidizer. It appears the engine has not operated without the catalytic oxidizer during the time covered by the records provided.

Condition VI.5 requires keeping engine fuel use records. These are included on the attached data sheets.

Condition VI.6 and VI.7 require keeping monthly and 12 month NOx and CO emissions calculations. This information is included on the attached data sheets.

Condition VIII.1 sets stack dimensions as a maximum diameter of 12 inches and a minimum height of 24 feet above ground level. The stack appeared to meet this condition.

COMMENTS:

A previous inspection report says there was a brine tank at this facility, but I didn't find one during this inspection.

The dehydrator has a Wenco flame arrested burner of 125,000 BTU/hour capacity. The dehy burner stack looked about 6 inches diameter and 20 feet high, unobstructed vertically upward. The still vent was about 2 inches diameter and 12 feet above ground level, terminating in a T shaped pipe fitting as a cap. There was "steam" coming from the still vent. There were minor glycol odors.

There were two 300 gallon drum on stilt tanks near the dehy. They stood over wooden berm structures. Waterproof fabric had been fastened over the tanks and to the edges of the berm structures to form something like a tent, probably to keep rainwater from filling the berms. One of these tanks was labeled methyl alcohol and the other triethylene glycol.

The compressor shed contains one Caterpillar natural gas-fired compressor engine. It is labeled GCS 633 in metal letters welded to the engine mount, identifying it as Unit 633 of Gas Compression Services. It was running at 1065 RPM. Engine oil pressure was 60 PSI, engine water temperature was about 185 degrees f, compressor oil pressure was 50 PSI.

There were two 300 gallon drum on stilts tanks inside the compressor shed, one labeled as ISO 100 industrial oil and the other as engine oil. There was a cubical plastic container about 4 feet on a side, near the engine, which was probably engine coolant. There were two orange-painted waste oil tanks. I saw a 55 gallon drum marked Spill Kit and three others marked as being for used oil filters only.

The exhaust leaves the building horizontally to a horizontal muffler. After the muffler an elbow directs exhaust through a tall vertical stack. The exhaust is unobstructed vertically upward.

Other than glycol odors near the dehy and "steam" from the still vent, I didn't note any odors or opacity from equipment at this site.

Maintenance looked good. I didn't see any stained soils that would indicate leaks or spills.

NAME William J Rogers Jr

DATE 8/18/2015

SUPERVISOR 