

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

N612544741

FACILITY: RIVERSIDE - CONNIE STEVENS EAST CPF		SRN / ID: N6125
LOCATION: NE NE SEC 29 T30N R3E, AVERY TWP		DISTRICT: Gaylord
CITY: AVERY TWP		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 06/08/2018
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On June 8, 2018, I inspected the Riverside Connie Stevens East CPF, near Atlanta. I did not find any violations during my inspection.

The facility is covered by PI 683-96B. The facility includes two natural gas fired reciprocating engines, driving compressors; and one glycol dehydrator.

One of the engines, labeled as GCS 798 in metal characters welded to its engine mount, is equipped with a catalytic oxidizer. This engine is located in the eastern of the two compressor sheds on site, along with the glycol dehydrator. The second engine, GCS 895, has no catalytic oxidizer and is located in the western of the two compressor sheds.

Permit 683-96B also includes a flexible group FGTANKS listed as "three 16,800 gallon storage tanks." These would be 400 (petroleum) barrel storage tanks, an extremely common size of storage tanks at oil and gas sites. I looked for large storage tanks during my inspection, but did not see any.

PI 683-96B, Table EUDEHY, requires compliance with 40 CFR 63, Subpart HH. AQD has not been delegated authority to enforce this Subpart. However, it is likely that this glycol dehydrator is not subject to the more stringent emission control requirements of Subpart HH. The facility processes Antrim Formation gas, which is very low in hazardous air pollutants, including benzene. Likely, benzene emissions are negligible. Benzene emissions of less than 1 ton per year exempt a dehydrator from the more stringent requirements of Subpart HH.

Table FGENGINES, Conditions I.1 and I.2, limit EUENGINE1 to 30 TPY of NOx and 30 TPY of CO per year. According to emissions calculations provided by Riverside, EUENGINE 1 emitted 9.23 tons NOx and 8.31 tons CO per year, based on a 12 month rolling time period ending October 2017. This complies with the permit conditions.

Table FGENGINES, Conditions I.3 and I.4, limit EUENGINE2 to 20 TPY of NOx and 30 TPY of CO per year. According to emissions calculations provided by Riverside, EUENGINE2 emitted 4.78 tons NOx and 16.11 tons CO per year, based on a 12 month rolling time period ending October 2017. This complies with the permit conditions.

Table FGENGINES, Condition III.1, requires an approved Malfunction Abatement Plan. AQD has an approved MAP on file for this facility. AQD approved it July 8, 2008.

Table FGENGINES, Condition III.2, prohibits operating any engine with an add on control device for more than 200 hours without that device per 12 month rolling time period. Condition IV.4 requires keeping records of hours of operation without an add on control device. This information was not in the printed records Riverside provided us. I called Natalie Schrader at Riverside. She says those are located in another tab of the spreadsheet. She reports that EUENGINE2, the one with the catalyst, did not operate without it within the past 12 months. I will accept this as showing compliance with the permit conditions.

Table FGENGINES, Condition IV.1, requires pollution control devices be installed and operating properly. During my inspection I saw the catalyst on ENENGINE2. It appeared to be installed and operating properly. According to catalyst temperature readouts, included in the attached records, temperature at the outlet of the catalytic oxidizer is higher than temperature at the inlet. This indicates pollutants are burning up inside the catalyst, and suggests that the catalyst is operating properly.

Table FGENGINES, Condition IV.2, requires a fuel flow monitor on each engine. I saw devices on each engine which appeared similar to those which a mechanic had pointed out to me as fuel flow monitors at another facility. In addition, Condition IV.5 requires recording fuel use data. The records, attached, include fuel use for each engine. These facts make it appear that the facility complies with requirements to measure and record fuel use.

Table FGENGINES, Condition VI.2, requires keeping records of fuel use in each engine. That data is included in the attached records.

Table FGENGINES, Condition VI.3, requires a maintenance log. The Compressor Downtime Reports, attached, satisfy this requirement.

Table FGENGINES, Conditions VI.6 and 7, require keeping monthly and 12 month NOx and CO emission calculations for each engine. This information is included in the attached records, in compliance with the permit conditions.

Table FGENGINES, Conditions VIII.1 and 2, require both engine exhaust stacks to have a maximum diameter of 12 inches at a minimum exhaust height of 36 feet above ground level. The stacks on site appeared to meet these requirements.

Table FGFACILITY, Conditions I.1, 2, and 3, set facility-wide emission limits of 90 tons NOx, 90 tons CO, and 40 tons VOC. Emissions data, included, does not include VOC. Facility-wide NOx emissions are given as 14.73 tons, facility-wide CO emissions as 24.59 tons. NOx and CO emissions comply with permit conditions.

Table FGFACILITY, Condition II.1, prohibits burning sour gas at the facility. I did not notice any equipment or odors which would make me suspect the facility processed sour gas.

Table FGFACILITY, Condition II.2, requires keeping monthly and 12 month NOx and CO emissions calculations. This information is included in the attached records.

#### COMMENTS:

The facility includes two compressor sheds. The east shed has a compressor and a glycol dehydrator. The west shed has a compressor only. I looked for large storage tanks. I believe I would have seen them if any were present, but I didn't see any.

The glycol dehydrator has a Wenco Flame Arrested Burner rated at 125,000 BTU per hour. The heater vent was about 6 inches diameter and 18 feet high, exhausting unobstructed vertically upward. The still vent was about 1.5 inches diameter exhausting 12 feet above ground, ending in a T shaped pipe fitting. There was some visible "steam" from the still vent. There were mild glycol odors near the dehydrator.

The east shed also contains one Caterpillar natural gas-fired reciprocating engine, driving a compressor for natural gas. The engine is equipped with a catalytic oxidizer. It was labeled as GCS 798 in metal characters welded to its engine mount. The exhaust pipe leaves horizontally through the shed wall to a pipe elbow, then straight up to considerable height to exhaust unobstructed vertically upward. Permit stack height is 36 feet; the stack appeared to meet this requirement.

Engine instruments reported engine oil pressure 65 psi, engine coolant temperature 190 f, compressor oil pressure 60 psi, 983 RPM. According to records on a clipboard hanging from the control panel, catalyst inlet temperature the day of my inspection was 926, outlet was 952 degrees f.

Small tanks in the east compressor shed included two 300-gallon drum on stilt tanks labeled Chevron American Industrial Oil ISO 100 and Chevron HDAX 5100 Ashless Gas Engine Oil. There were two more 300 gallon drum on stilt tanks outside, near the dehydrator. One was labeled Methyl Alcohol and the other Triethylene Glycol. All these small tanks were above lined wooden berm structures.

The west compressor shed contained another Caterpillar natural gas fired compressor engine. This one has no catalytic oxidizer. It was labeled GCS 895 in metal characters welded to the engine mount. Analog engine instruments reported engine oil pressure 70 psi, compressor oil pressure 55 psi, compressor oil temperature 160 degrees f, engine coolant temperature 180 degrees f. This engine also had a digital readout which reported 99743 hours of operation, 985 RPM, 27 volts, 64 psi (engine oil, I presume), 183 f (coolant temperature, I presume).

Small tanks in the west compressor shed included two 300 gallon drum on stilt tanks labeled Chevron HDAX Low Ash Gas Engine Oil and Chevron AIO ISO 100; two large drum-style tanks, painted orange and labeled Used Oil; and one oval metal tank, unlabeled, but it was near the radiator and appeared to be piped to it, so probably a coolant overflow tank.

Aside from "steam" from the dehy still vent I did not see any opacity. Aside from mild glycol odors I didn't notice any odors. I didn't see any stained soils which would make me suspect spills or leaks. Maintenance appeared to be good.

NAME William J Rogers Jr

DATE 8/14/18

SUPERVISOR SN

