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

P048039939

FACILITY: NUENERGY OPERATING INC.		SRN / ID: P0480
LOCATION: SECTION 23, AVERY TWP		DISTRICT: Gaylord
CITY: AVERY TWP		COUNTY: MONTMORENCY
CONTACT:		ACTIVITY DATE: 05/19/2017
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection		
RESOLVED COMPLAINTS:		

On May 19, 2017, I inspected the NuEnergy Avery 23 CPF. I did not find any violations of the permit or of State air quality rules during my inspection.

In addition, NuEnergy has provided me with electronic copies of facility records kept to show compliance with their permit, PI 175-13. Copies of these records are attached.

Permit 175-13, Table EUDEHY, Condition III.1 requires compliance with 40 CFR Part 63, Subpart HH. Condition VI.1.b) allows doing this by demonstrating that average daily throughput is less than 85,000 standard cubic meters per day (about 3 million standard cubic feet per day. Production records, attached, show average daily production of approximately 16,000 to 20,000 standard cubic feet per day, which is well under 3 million standard cubic feet. This complies with the permit conditions.

Table EUENGINE, Conditions 1.1 and 1.2, limit the engine to 60 tons per year of nitrogen oxides (NOx) and 65 tons per year of carbon monoxide (CO). Emissions estimates, attached, show the company estimates the facility emits about 32 tons per 12 month rolling time period of CO and about 30 tons per 12 month rolling time period of NOx. This complies with the permit conditions.

Condition III.1 requires a Malfunction Abatement Plan. The company submitted one. AQD approved it on April 9, 2014.

Condition III.2 limits engine operation without an add on control device, if there is one, to no more than 200 hours per year. An email from NuEnergy, attached, reports that the engine has no add on control device. Therefore this condition is not applicable.

Condition IV.1 requires any add on control device to be installed and operating properly. As noted above, there is none, so this condition is not applicable.

Condition IV.2 requires a device to monitor natural gas usage for EUENGINE on a continuous basis. Gas consumption is listed in plant records, attached. While on site I found an electronic digital readout which reported various gas flows, identified by line numbers. This could have included a value for engine gas consumption. In my opinion it is likely the company complies with this permit condition.

Condition VI.1 requires monitoring and recording daily gas consumption for the engines. As noted above, it is likely this is being done.

Condition VI.3 requires a maintenance log. An example sheet from the maintenance log is attached. This complies with the permit condition.

Condition VI.4 requires logging hours of operation without an add on control device. There is none, so this condition is not applicable.

Condition VI.5 requires keeping monthly fuel use records. This information is included on the facility data sheets, attached. This complies with the permit condition.

Conditions VI.6 and 7 require monthly and 12 month rolling time period NOx and CO emissions calculations. This information is included in the facility data sheets, attached. This complies with the permit conditions.

Condition VIII.1 sets exhaust stack dimensions as a maximum diameter of 10 inches with a minimum height of 34.5 feet. The stack appeared to meet these requirements.

COMMENTS

The facility is located west of M-33 just south of Jewell Road. Latitude and longitude as supplied in our database are correct.

The facility sign identifies the facility as Nu Energy Operating LLC / Avery 23 CPF / Avery Twp, Montmorency Co / SW/NE/NE Sec 23 - T30N - R3E. In Case of Emergency Ans Service 989-705-2818

I found a digital display on the outside of the compressor shed. It was reporting flow in various lines throughout the facility. The largest flow reported was 12,054 MSCF. This seems to be in line with monthly production, which according to data sheets (attached) has been running about 18,000 MSCF.

The company has claimed this engine is operating without an add-on control device. The engine has a catalytic oxidizer in the exhaust pipe. It appears they are not taking credit for a control device in their emission reporting, based on the amounts of NOx and CO claimed and my rough estimate of potential uncontrolled emissions. If they are not claiming a control device and are in compliance without one, a non-operating control device is not a violation. To be sure, I will question the company about this and follow up in another report if necessary.

The facility contains one Caterpillar natural gas fired compressor engine. It is marked GCS 424 in metal characters welded to the engine mount, identifying it as Unit 424 of Gas Compression Services. It was running at the time of my inspection: 982 RPM, engine oil temperature 180 degrees f, compressor oil temperature 155, engine coolant temperature 190, engine oil pressure 72 PSI, compressor oil pressure 62 PSI.

The facility contains one glycol dehydrator with a Wenco flame arrested burner rated at 125,000 BTU per hour. This matches what is reported on the attached plant data sheets. The burner stack appeared to be about 6 inches diameter exhausting unobstructed vertically upward alongside the compressor shed at about 20 feet above ground level. The still vent emerges from the side of the shed about 12 feet above ground level, venting to two horizontal outlets about two inches in diameter each.

I noted the following tanks: One 400 barrel tank inside a lined berm, probably a brine tank. Two 300 gallon drum on stilt style tanks inside the compressor shed, one labeled as Chevron Regal R&O ISO 100 industrial oil and one as Chevron HDAX 5200 Low Ash Gas Engine Oil. Both of these tanks were above lined wooden berm structures. Outside of the shed, near the dehydrator, were two more 300 gallon drum on stilts tanks above lined wooden berm structures. One was labeled as methyl alcohol and the other as triethelyne glycol. There was an oval cross section metal tank near the shed wall, close to the radiator end of the engine, which was probably engine coolant. There was an orange-painted tank on the ground inside the shed which was probably waste oil.

The facility includes a salt water disposal well. This has a sign identifying it as Avery 23 SWD, Permit 47596.

Facility maintenance appears to be good. I did not see any stained soils which would indicate any spills or leaks.

NAME William J Rogers L. DATE 5/25/17 SUPERVISOR