

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

N821740225

FACILITY: Linn Operating, LLC - Unit 179 Booster		SRN / ID: N8217
LOCATION: SW 1/4 NW 1/4 SEC 34 T30N R02E, BRILEY TWP		DISTRICT: Gaylord
CITY: BRILEY TWP		COUNTY: MONTMORENCY
CONTACT: Diane Lundin , Senior EHS Representative		ACTIVITY DATE: 06/09/2017
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection, minor source		
RESOLVED COMPLAINTS:		

On June 9, 2017, I inspected the Unit 179 Booster, located near Atlanta.

Facility latitude and longitude are approximately 44.951669, -84.192001. I will ask to have this information added to our database. The facility is located a short distance off Shoreline Drive, south of the Linn Energy South Briley 34, SRN N6154.

The facility is covered under Permit to Install 394-08. This permit lists one natural gas fired reciprocating engine. This matches what I found on site.

Permit 394-08, Table EUENGINE1, Condition I.1 limits nitrogen oxides (NOx) to 68 tons per year based on a 12 month rolling time period. Emissions estimates from Linn Energy, attached, report 37.98 tons per 12 month rolling time period. This complies with the permit condition.

Condition I.2 limits carbon monoxide (CO) to 6 tons per 12 month rolling time period. Emissions estimates, attached, report 2.83 tons per 12 month rolling time period. This complies with the permit condition.

Condition II.1 prohibits burning any sour gas at the facility. I did not see or smell any evidence of sour gas at the facility. The facility compresses Antrim Formation gas, which is almost always sweet gas.

Condition III.1 requires a Malfunction Abatement Plan. The owners of the facility submitted one. Air Quality Division (AQD) approved it March 30, 2009. This complies with the permit condition.

Conditions III.2, IV.1, and VI.4 have to do with proper operation and recordkeeping for any add on control device. This engine does not have an add on control device, so these conditions do not apply.

Condition V.2 requires a device to monitor natural gas usage by the engine. Condition VI.2 requires monitoring engine gas consumption. Condition VI.5 requires recording this gas consumption. I did not identify a fuel flow meter on site. However, gas consumption information is included on the emission sheets, attached; this complies with Conditions VI.2 and VI.5. This also suggests that a device to measure gas consumption is in place, which would comply with Condition V.2.

Condition VI.3 requires a maintenance log. Example pages of the maintenance log are attached. This complies with the permit condition.

Condition VI.6 requires monthly and 12 month NOx emission calculations. Condition VI.7 requires monthly and 12 month CO emission calculations. Results of these calculations are included on the emission sheet, attached. This complies with the permit conditions.

Condition VIII.1 sets stack dimensions as a maximum diameter of 6 inches and a minimum height of 36 feet above ground level. The stack is about 6 inches diameter and appears to be about 30 feet high; judging by eye, it complies with the permit condition.

COMMENTS:

The booster engine is located next to a well labeled as Linn Operating Inc. State Briley B1-34, NW SW NW Sec 34, T30N, R2E, Pmt 45389. It is one medium to small sized natural gas fired engine without add-on control device. It appears to be made by Caterpillar.

The engine was running at the time of my inspection. I didn't find any control panel to record operating conditions. There were some dial-type thermometers in what appeared to be coolant lines; one of this pair of lines had a coolant temperature of about 100 degrees f, the other 175 degrees f.

I saw a note written in white on the shed near the entrance, "Linn 179," which matches the company's name of Unit 179 for this facility in the documentation they provided me.

I found one 300 gallon drum on stilt type tank labeled Chevron HDAX Low Ash Engine Oil. It was near the engine inside the shed. I didn't note any other tanks on site.

Maintenance appeared good, although I did note that the engine was unusually loud. I didn't see any stained soils or other evidence of leaks or spills. I didn't note any odors on site.

NAME William J Rogers L.

DATE 6/14/17

SUPERVISOR SN