

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

N089047396

FACILITY: Viking Energy of Lincoln, LLC		SRN / ID: N0890
LOCATION: 509 W. State St., LINCOLN		DISTRICT: Gaylord
CITY: LINCOLN		COUNTY: ALCONA
CONTACT: Neil Taratuta , Plant Manager and Responsible Official		ACTIVITY DATE: 12/18/2018
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection and records review		
RESOLVED COMPLAINTS:		

On December 18, 2018, I inspected Viking Energy of Lincoln. Mr. Neil Taratuta accompanied me on the inspection, showed me around, and provided the records I requested. I did not find any violations during my inspection.

The facility appears unchanged from as I remember it in previous inspections.

Compliance with specific permit conditions was as follows.

SOURCE-WIDE CONDITIONS

Most of this table is not applicable, with the exception of:

Condition III.1. At a minimum street and lot areas should be washed once a month from May through September. I asked Mr. Taratuta when they washed the streets and lots, and he told me twice a month in summer. The compliance spreadsheet (printout attached) has a space where this should be recorded; a July spreadsheet shows it having been done twice during July.

Condition VI.1 requires keeping records of street sweeping. As noted above, this is being done.

Condition IX.1 requires an approved fugitive dust plan. AQD approved the most recent revision of the fugitive dust plan April 1, 2014.

EURMHANDLING- Raw materials handling.

Condition I.1 sets a 5% opacity limit for raw material handling. I didn't see any opacity at all from the raw material handling during my inspection.

Condition VI.1 requires observing for visible emissions at least once daily. According to the compliance spreadsheet, attached, this is being done as required.

Condition VI.2 requires checking conveyors, chutes, enclosures and so on for leaks weekly. Mr. Tatatuta said this is being done as part of the daily inspections.

I did not find a requirement for a fuel procurement and handling plan in the permit. Regardless, Viking has one. AQD approved it May 8, 2013.

EUBOILER- 230 MW solid fuel boiler burning wood, tire derived fuel, and wood products. Natural gas is also burned but only for startup.

Conditions I.1 through 43 are various emission limits for criteria and hazardous air pollutants. In the most recent emission test, July 16, 2016, the facility showed compliance with all criteria and hazardous air pollutant limits.

Specific tons per year limits may be determined from annual emission reports. The most recent available reports (2017) indicate the following:

Pollutant	Condition No. and Limit	Amount reported and result
CO	I.3 247.2 tons/year	106 tons; compliance
NOx	I.6 247.2 tons/year	212 tons; compliance
SO2	I.9 247.2 tons/year	154 tons; compliance
PM-10	I.13 98.9 tons/year	30 tons; compliance
VOC	I.16 19.1 tons/year	0.8 tons; compliance

Condition II.1 limits natural gas to 490,200,000 cubic feet per year. Mr. Taratuta told me that Viking only uses natural gas for startup. They prefer not to use any more than necessary for a clean start, because it is expensive. The compliance spreadsheet, attached, indicates they have used 9,130 ccf (913,000 cf) so far in 2018. This complies with the permit condition.

Alternative wood derived fuels: Conditions II.2, 3, 4, 5, 6, and 7 set limits in tons per 12 months and tons burned per 24 hour time period for Particle Board and Plywood, Creosote Treated Wood, and Pentachlorophenol Treated Wood. Mr. Taratuta says the facility hasn't burned any of these materials in a long time. The compliance spreadsheet, attached, claims there has been none of this material burned in 2018. This complies with the various permit conditions.

Mr. Taratuta further mentioned that he didn't think the facility was likely to burn these alternative wood derived fuels. There is not a great amount of any of them available in the area. There's no incentive to deal with these fuels unless they can get a large amount for low cost.

Condition II.8 limits TDF to 16,060 tons per 12 month time period. Condition II.9 limits TDF to 44 tons burned per 24 hours. According to the compliance spreadsheet, attached, as of December 17 the facility had received 11,372 tons of TDF. On the days in December the highest amount burned was 36 tons. This complies with the permit conditions.

Condition III.1 and 2 specify that COMS should be operated and its accuracy tested as required by Federal regulations. In the most recent RATA test, August 14, 2018, the facility demonstrated compliance with these permit conditions.

Condition III.3 prohibits burning pentachlorophenol wood and TDF simultaneously. Condition III.4 allows burning TDF and particle board or plywood simultaneously, with AQD approval. The facility has not been burning these alternative wood derived fuels, so these conditions are not applicable.

Condition III.5 requires the boiler undergo a cold start using natural gas only. Mr. Taratuta told me they do this, and that cold starts are the only time they use natural gas in the boiler. He told me they had a cold start December 5, starting on gas and switching to wood later. The compliance spreadsheet, attached, shows natural gas was used in the boiler that day.

Condition III.6 requires the multiple cyclone and electrostatic precipitator be operating properly. The multiple cyclone was installed; based on low opacity it was probably operating properly. Based on opacity the electrostatic precipitator was also probably operating properly. Instruments in the control room said it was operating properly:

Cell 1: 400 V, 35A, 11 KW primary, 51 KV1, 51 KV2, 245 mA secondary; 3 sparks/min, 0 arcs, 162 degrees f

Cell 2, 350 V, 42A, 11 kW primary, 44 KV1, 44 KV2, 240 mA secondary; 0 sparks, 0 arcs, 123 degrees f

Cell 3, 330 V, 42A, 11 kW primary; 40 KV1, 40 KV2, 245 mA secondary; 1 spark/min, 0 arcs, 134 degrees f

Mr. Taratuta told me they had done some extensive maintenance on the ESP. The maintenance reduced the sparking and arcing, and the precipitator seemed to be operating with less trouble generally.

Condition V.1 and 2 require opacity and CEM RATA tests according to Federal procedures and regulations. The most recent RATA was August 14, 2018. The COMS and CEMs passed their tests.

Condition V.3 requires exhaust flow testing each year. This was performed and reported in August, 2018.

Conditions V.4 and V.5 require testing for various criteria and hazardous air pollutants once each five years. The most recent test was completed July 16, 2015.

Condition VI.2 requires continuous opacity monitoring. This is being done. The opacity monitor was operating properly at the time of my inspection. Opacity was 1.08% at the time of my inspection.

Condition VI.7 requires monitoring CO, NOx, SO2, and O2 continuously. This was being done. At the time of my inspection CO was 96 ppm, NOx 160 ppm, SO2 55 ppm, and O2 5.5%.

Condition VI.8, 9, and 12-16 require keeping emissions and fuel use records in acceptable formats. The required information is in the compliance spreadsheet, attached, and the formats appear to be acceptable.

Condition VI.10 requires properly maintaining the emission monitoring system. It appeared to be operating properly. Condition VI.11 requires emissions monitors to be operating at all times when the boiler operates. The company's monitor downtime reports claim this is being done, save for small amounts of downtime which are chiefly for maintenance and calibration.

Conditions VII.1, 2, and 3 require annual and semiannual certification and deviation reports. These have been submitted as required.

Condition VII.4 requires prompt submittal of CEMS and COMS audits. These have been submitted as required.

Condition VII.5 requires AQD approval of monitoring procedures during CEM or COM replacement. This did not apply during 2018.

Conditions VII.6, 7, and 8 refer to reports required for exceedances, deviations, excess emissions, and monitoring downtime. All these required reports have been submitted as required.

Conditions VII.9 and 11 (sic; there is no Condition 10) refer to stack test protocols and reports. These were submitted as required for the most recent stack test series, in 2015.

Condition VIII.1 requires the exhaust for the boiler be a maximum diameter of 72 inches and a height of 150 feet. The stack appears to meet these requirements.

Condition IX.1 requires a Fuel Procurement and Handling Plan. AQD approved one May 8, 2013.

Condition IX.2 requires a Malfunction Abatement Plan. AQD approved one, latest revision approved April, 2014.

Condition IX.3 requires compliance with CAM, which means there should be a CAM Plan. AQD approved one May 8, 2013.

EUASHHANDLING: Ash handling system

Condition I.1 sets an opacity limit of 5%. I did not see any opacity while I was on site.

Condition III.1 requires the ash wetting system be installed and operating properly. It was there, and appeared to be operating properly.

Condition VI.1 requires observing ash handling for opacity once per day. This is being done. Inspections are indicated on the compliance spreadsheet, attached.

EUGENERATOR, Emergency generator

Condition I.1 sets a SO₂ limit of 0.56 lb/MMBtu heat input, "equivalent to using oil with a 0.5 percent sulfur content by weight, and a heat value of 18,000 Btus per pound of diesel fuel." Mr. Taratuta told me they used standard low sulfur diesel fuel for this generator, which would meet these specifications. He did not have a copy of the fuel analysis handy with this year's compliance report because they haven't refilled the tank this year.

Condition VI.1 requires a log of hours of operation. This is being kept. The engine has a non-resettable hour meter and has accumulated 172.7 hours of operation since being installed in the 1980s, so it is not run much.

Condition VI.2 requires analytical results for each shipment of fuel oil. Mr. Tatatuta did not have one handy with this year's compliance report because they haven't refilled the tank this year. I decided to use compliance discretion and not press the issue.

FGCOLDCLEANERS: Cold cleaners

Mr. Taratuta showed me their cold cleaner. It is a mineral oil type, which does not use halogenated compounds, is not heated, and is small; therefore most of the conditions in our standard cold cleaners table do not apply.

Two conditions which do apply are: 1. The cover of the cold cleaner should be kept closed when not in use. It was closed at the time of my inspection. 2. Instructions should be posted nearby. The instructions were posted on the cover of the cold cleaner itself. This is acceptable.

COMMENTS

I didn't see trackout. Maintenance appears to be good.

I looked around the wood yard. Mr. Taratuta told me they didn't have any creosote treated wood, pentachlorophenol treated wood, particle board, or plywood in the wood yard. I didn't see any.

NAME William J Rogers Jr DATE 12/28/2018 SUPERVISOR SN

