

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

N089030494

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		ACTIVITY DATE: 07/16/2015
STAFF: Gloria Torello	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: 2015 FCE & RATA Observation		
RESOLVED COMPLAINTS:		

Viking Energy of Lincoln is located at 509 West State Street in Lincoln, Alcona County, Michigan. The plant is an electrical generating facility. Its primary fuel is wood chips and tire-derived fuel (TDF), and the ROP allows use of pentachlorophenol treated wood, creosote treated wood, and particleboard and plywood. The facility receives all fuel by truck and uses it to fuel a boiler to produce high-pressure steam. The steam is used to power an electrical generating turbine, which generates up to 18 megawatts of electricity at full capacity. The ash from burning the wood and alternative fuels is collected, treated with water and transported to a licensed landfill.

Permit. On October 1, 2013 the AQD issued ROP MI-ROP-N0890-2013 which expires on October 1, 2018. An administratively complete ROP renewal application is due between April 1, 2017 and April 1, 2018.

Plans. The ROP required, AQD approved, plans on file include:

- PM/MAP
- Fuel Procurement & Handling
- Fugitive Dust Plan

The 2014 MAERS included for EUBOILER:

- CO 123 tons, NOx 199 tons, and SO2 161 tons and the ROP allows 247.2 tpy of CO, NOx and SO2;
- PM-10 21 tons and the ROP allows 98.9 tons of PM-10.

Records. The permittee supplied records on November 26, 2014 and July 16, 2015. Records include EUBOILER CO, NOx, SO2, PM, and PM-10 emission limits in the ROP units of measurements. EUBOILER records also include the other pollutants that require stack testing to show compliance, such as Arsenic, Benzo(a)Pyrene, HCl, etc. A review of these records shows compliance with the ROP emission limits.

EUBOILER records also include monthly and 12-month rolling material use, such as natural gas, TDF, etc. Records show material use below the permitted limits.

The permittee keeps records of "Wash Parking Lot" for dust suppression; and daily visible emissions readings. In June 2015, EUBOILER's 12-month rolling hours of operation were 8,545.3 (the ROP limit is 8,600 hours).

The permittee consistently maintains their records, and makes records available to AQD upon request. The records demonstrate compliance with permit limits.

**MACTS.** The facility is minor for HAPs making the facility an area source for these MACTS:

- 40 CFR, Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources; and
- 40 CFR, Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines for Area Sources.

The EPA has not delegated Subpart JJJJJJ and Subpart ZZZZ to MI AQD and the Subparts were not reviewed.

**MACES.** MACES' *Facility Information* was reviewed and no update was needed. MACES' *Regulatory Info, Summary*, was reviewed and to "Subject To" was added 40 CFR, Part 63, Subpart ZZZZ.

**Brochure:** The inspection brochure will be forwarded to the permittee with the site inspection notes via email.

**Compliance.** A review of AQD files, and MACES report generator, show no outstanding violation.

**Inspection.** During the July 16, 2015 site visit, Gloria Torello from AQD met with Neil Taratua of Viking Energy staff. Neil provided monitoring records. Neil said the new NOx analyzer was installed. The old NOx analyzer works but it was getting old. The old NOx analyzer will be kept on site as a back-up. Neil and Gloria visited the control room. The control room EUBOILER computer monitor included these readings:

- CO: 18.1 pph (57.5 pph permitted), 0.081 #/mmBtu (0.25 #/mmBtu permitted);
- NOx: 50.9 pph (57.5 pph permitted), 0.226 #/mmBtu (0.25 #/mmBtu permitted);
- Sox: 34.0 pph (57.5 pph permitted), 0.15 #/mmBtu (0.25 #/mmBtu permitted);
- 16.4 KW (the boiler has 18 KW capacity).

The RATA was being completed by Steve Byrd and David Engelhardt of Network Environmental. David Patterson and Gloria Torello from AQD were observing the RATA. In addition to the RATA, the new NOx analyzer completed the seven day drift- the drift results will be included in the RATA report.

The permittee's computer locked up during Run 2 of the RATA. Run 2 will not be used as a valid RATA run, but the final report will include available info on Run 2.

The EUBOILER stack had five percent visible emissions. There was some ash track out from the storage building. There was no noteworthy dust from the piles of chipped wood or TDF. The TDF is on a cement pad.

**Permit Conditions:**

**Source-Wide Conditions**

The Daily Status Report records street and parking lot washings. The June 2015 report shows washings on June 9 and 23.

#### **EURMHANDLING**

There was no noteworthy visible emissions from the wood chip or TDF piles. The Daily Status Report records daily VE observations.

#### **EUBOILER**

Torello reviewed records of CO, NOx and SO2 in lb/MMBtu, PPH, and tpy. The records show the actual emissions are below the permitted limits.

Regarding Special Conditions I. 11, 12, 14, 15, 17, 18, 20, 21, 23, 24, 26, 27, 29, 30, 32, 33, 35, 36, 38, 39, 41, 42, these pollutants, in the units of measurements lb/MMBtu and pph, are tested every five years. The next test is due in 2015. On August 5, 2015 Network Environmental submitted a test protocol to AQD.

All fuel use is recorded and records show fuel use below the permitted material limit.

The COMs and CEMs are installed. Annual audit of the COMs and CEMs RATA for 2015 was completed in July.

Neil confirmed Viking begins firing the boiler from a cold start using natural gas only. The boiler operates only when the multiple cyclone collector and ESP are operating properly.

Torello reviewed records documenting the boiler operates less than the permitted 8600 hours per 12-month rolling time period.

The permittee consistency submits semiannual reports and annual certifications in a timely manner. RATAs and opacity audit results are submitted in a timely manner. Test protocols and results are submitted in a timely manner. The semiannual report includes the CAM report. Quarterly reports are timely.

No changes have been made to the boiler stack's diameter or height.

#### **EUASHHANDLING**

Visible emissions from ash handling were less than 5 percent during the site visit. Daily the permittee monitors and records the VE from ash handling, see the Daily Status Report.

#### **EUGENERATOR**

A log of shows generator use is not used more than 100 hours per year.

Fuel Procurement Plan: The permittee keeps a log of the fuel Supplier's Name, fuel type, and weight of fuel. The permittee has a Fuel Specification sheet for fuel suppliers to review and sign.

**Fugitive Dust Plan:** Curtains and Pant Legs are on chutes to minimize dust. The radial stacker distance to the top of the wood pile is minimized to reduce dust. The ash is stored in a building, and wetted, to reduce dust. VE readings are taken daily to evaluate if there is dust.

**Malfunction Abatement Plan (MAP):** During the annual outage, maintenance and inspections are made of items in the MAP. Records are made of inspections. The control room has a computer with instant readouts of CO, NOx and SO2 in lbs/MMBtu.

**Conclusions.** Via onsite inspection, discussion with facility staff, and review of records, the permittee demonstrates compliance with the conditions of the MI-ROP-N0890-2013.

NAME Gloria Jello

DATE 8-13-15

SUPERVISOR

