

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

G525222072

FACILITY: Oakland Co. Service Center - Central Steam Plant		SRN / ID: G5252
LOCATION: 1200 North Telegraph Building 22 East, PONTIAC		DISTRICT: Southeast Michigan
CITY: PONTIAC		COUNTY: OAKLAND
CONTACT: Joseph Murphy , Facilities Specialist		ACTIVITY DATE: 07/11/2013
STAFF: Robert Elmouchi	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

On July 11, 2013, I conducted a scheduled inspection of the Oakland County Department of Facilities Central Power House. The facility is located in Building No. 22 at 1200 North Telegraph Road, Pontiac, Michigan. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules, and Opt-Out Air Use Permit to Install (PTI) 150-03.

Upon entering the site, presented photo identification and explained the purpose of the inspection to Mr. Joseph M. Murphy, Facilities Specialist, and Mr. Dan Cole, Boiler Mechanic. Both Mr. Murphy and Mr. Cole escorted me during the inspection of the facility.

The Oakland County Central Power House is located in Pontiac within the Oakland County Service Center East Campus. It consists of four (4) boilers that produce steam for heating and cooling county buildings in the surrounding county service center. The facility runs 24 hours a day, 7 days a week. Three of the boilers (Nos. 1 through 3) are drum water tube boilers, manufactured by Erie City Boilers, which are rated at 30,000 lbs steam per hour and are fired on either natural gas or No. 6 fuel oil (bunker oil) with a heat input rating of 36MMBTU/hour each. The facility has the option to burn No. 6 fuel oil but has elected to burn only natural gas since September 2010 because of the comparatively low cost of natural gas. Since September 2010, the use of No. 6 fuel oil has been only for the purpose of maintenance.

The fourth boiler (No. 4) is a water tube keystone boiler and can only burn natural gas. This boiler is manufactured by Zurn (with a Coen burner) rated at 60,000 lbs. steam per hour and has a heat input rating of 72MMBTU/hour.

I did not detect any foul odors and observed zero visible emissions at the stack exit. There are three (3) storage tanks in the facility basement with a total capacity of 90,000 gallons of No. 6 Fuel oil. No. 6 fuel oil, also known as bunker oil, is very thick and has to be warmed 2 to 3 days to reduce the viscosity enough for it to be injected into a burner. The sulfur content limit of the No.6 fuel oil is also a limiting factor in firing the boilers with this fuel because low sulfur bunker oil is not readily available in this area and therefore transportation fees increase the cost of using this fuel. The last shipment of fuel oil was received in 2009. The PTI limits the use of fuel oil to 757,000 gallons per 12-month rolling time period and there is no use limit on natural gas. The permittee has maintained compliance with the fuel oil use limit.

The PTI limits the sulfur content of fuel oil to 1.5 percent by weight. I reviewed fuel shipment records and testing analyses, which appeared to indicate compliance with the fuel oil sulfur content limit of 1.5 percent by weight. Copies of some the fuel oil shipment analysis receipts are attached to this report.

I observed the following panel display readings for the storage tanks:

Tank No.1: 26,132 gallons

Tank No.2: 18,000 gallons – NOTE: The display for this tank needed repair. This value is an estimate per Mr. Cole.

Tank No.3: 24,713 gallons.

The monthly and 12-month rolling SO2 calculations appear to indicate compliance with the annual emission limit of 89.4 tons per year.

Conclusion

It appears this facility is operating in compliance with the conditions of PTI No. 150-03.

NAME *Robert Sturrock*

DATE 7/26/13

SUPERVISOR CJE