

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

N794045881

FACILITY: NORTH KENT SEWER AUTHORITY		SRN / ID: N7940
LOCATION: 4775 COIT AVE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Scott Schoolcraft, Director		ACTIVITY DATE: 08/30/2018
STAFF: David Morgan	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

At 2:00 P.M. on August 30, 2018, Air Quality Division (AQD) staff Dave Morgan conducted a scheduled inspection of the North Kent Sewer Authority (NKSA) located at 4775 Coit Avenue in Plainfield Township. The purpose of the inspection was to determine the facility's compliance with state and federal air pollution regulations as well as to evaluate equipment covered under Permit to Install (PTI) No. 389-07. Accompanying AQD staff on the inspection was Scott Schoolcraft, Director.

FACILITY DESCRIPTION

The NKSA facility on Coit Avenue is a wastewater treatment facility, also known as the PARCC Side Clean Water Plant. Construction of the NKSA facility was completed in 2008 and serves the communities of Rockford, Plainfield Charter Township, Alpine Township, Cannon Township, and Courtland Township. The facility consists of the headworks, bioreactors, membrane filters, biosolids processing and ultraviolet disinfection.

The facility is a minor source of emissions.

COMPLIANCE EVALUATION

PTI No. 389-07 covers a biofilter system used to control odors from the wastewater treatment plant. Under the permit, the facility is required to monitor the operation and maintain records of inspection, maintenance and repairs conducted. The facility is maintaining all records in accordance with the permit.

It is noted that when the equipment was installed in 2008, odor equipment at wastewater treatment facilities was not exempt from air use permitting. However, in 2016 the Michigan Air Pollution Control Rules were amended and now the equipment can be considered exempt under Rule 285(2)(m). Per confirmation from Mr. Schoolcraft, PTI No. 389-07 will be voided.

Emergency Generator:

The NKSA facility has one emergency generator for backup power should the plant power shutdown. The unit consists of an electric generator turbine and a compression ignition reciprocating internal combustion engine. The unit has the following specifications:

Manufacturer/Model	Cummins Genset: 2500DQLC Engine: QSK78-G
Manufacture Date	Not available - assumption that it is after April 6, 2006
Installation Date	October 5, 2016 (based on purchase date)
EPA Certification	CEX-NRCI-06-30
Fuel Type	Diesel
Heat Input capacity	approx. 23.6 mmBtu/hr (as calculated)
Horsepower rating	Standby rating: 3,740 brake-horsepower
Cylinders	v18
Displacement	4.3 liters per cylinder
Electricity generation	2.5 megawatts
Total hours of operation	378.3 hours since commencement of operation (approx. 38 hours per year)

The equipment has a calculated heat input capacity of 23.6 million Btu per hour (mmBtu/hr) which is above the 10,000,000 mmBtu/hr threshold contained in the Rule 285(2)(g) exemption from air use permitting for internal combustion engines. As a result, the NKSA will be cited in violation of Rule 201 and will need to obtain an air use permit.

Also, compression ignition engines are regulated under 40 CFR Part 60 Subpart IIII if they are constructed after July 11, 2005 and manufactured after April 1, 2006. Under the standard, commencement of construction is defined as the date the equipment was ordered which was identified as October 5, 2006. Without a specific manufacture date of the equipment, AQD staff assumes that the unit was manufactured after April 1, 2006 and therefore subject to the Subpart IIII requirements.

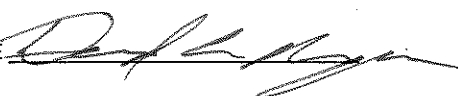
The following summarizes the basic requirements of Subpart IIII and provides a compliance discussion:

1. Operate the unit less than 100 hours per calendar year for emergency and non-emergency situations. The facility documented operating hours to be about 38 hours per year.
2. Meet specific emission limits in the standard which can be accomplished through purchase of an EPA certified engine. An EPA Certificate of Conformity, No. CEX-NRCI-06-30 was found from the EPA website.
3. Maintain and operate the equipment according to manufacturer specifications. Mr. Schoolcraft indicated that the manufacturer provides all routine maintenance.
4. Use ultra-low sulfur diesel fuel with a sulfur content of less than 15ppm. Mr. Schoolcraft provided documentation that the fuel used contains less than 15ppm sulfur.

Based on the information provided, it appears that the requirements of Subpart IIII are being met.

SUMMARY

NKSA will be sent a Violation Notice for violations identified above.. Information obtained during the compliance review will be attached and placed in AQD files. A request to void PTI No. 389-07 was made to the AQD Permit Section.

NAME  DATE 9/27/18 SUPERVISOR 