

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

N246742719

FACILITY: C L K PUBLIC SCHOOLS		SRN / ID: N2467
LOCATION: MINE ST, CALUMET		DISTRICT: Upper Peninsula
CITY: CALUMET		COUNTY: HOUGHTON
CONTACT: Jerry Labelle , Maintenance Supervisor		ACTIVITY DATE: 12/11/2017
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Onsite Scheduled inspection to determine compliance with #93-90.		
RESOLVED COMPLAINTS:		

FACILITY: CLK Public Schools (SRN/ID: N2467)
INSPECTION DATE: December 11, 2017
MDEQ-AQD Staff: Shamim Ahammod, Environmental Engineer
FACILITY REPRESENTATIVE: Jerry Labelle, Maintenance Supervisor
LOCATION: The facility is located at 57070 Mine Street, Calumet, MI 49913. Wood fired boiler is located at the door No. 16. All the doors in the school are numbered. It is rectangular shape cream color building near Church Street.

SOURCE DESCRIPTION:

In 1990, a wood-fired boiler was installed under Permit to Install (PTI) #93-90 to provide steam to heat the CLK Public Schools. It is fired with waste wood fuel at 3.883 MMBTU/hr, and steam pressure at 0-15 psi. Typically, they use the wood-fired boiler only when the temperature is under 40 F throughout the winter season, and they keep the wood-fired boiler idle during the summer season.

Natural gas-fired boiler #1 was installed in 1971 and is used as a backup for the wood-fired boiler. It has a heat input rating of 5.557 MMBTU/hr and is exempt from permitting per R336.1282, 2.b.i.

INSPECTION:

On December 11, 2017, I (Shamim Ahammod) conducted a scheduled inspection of the CLK Public Schools. I called maintenance supervisor in the morning before going to the facility. He informed me that wood-fired boiler is located at the door no. 16 and all the doors in the school are numbered. According to their instruction, I arrived at the door no. 16 and met with Jerry LaBelle, Maintenance Supervisor and Kevin Heikkinen, Janitorial Supervisor. I told them the purpose of the inspection was to conduct a scheduled inspection of the facility, and to determine the company's compliance with their issued PTI No: 93-90. At the beginning of our meeting, we discussed issued permit, and then we went on a brief walk through the plant to get an idea of the overall operations at the plant.

REGULATORY ANALYSIS:**Wood fired boiler:**

During the inspection, the wood-fired boiler was in operation and steam pressure was 5.7 psi. As I observed, the wood-fired boiler burns hardwood chips as directed in Special Condition (SC) 20. Wood chips are stored in the storeroom, and is fed to the

boiler by a series of screw conveyors, and then charged to the boiler by a blower. After burning, ash is collected through an airlock that dumps to a conveyor out to an enclosed dumpster (SC 17). Bottom ash is also conveyed to the dumpster (SC 17). No fugitive dust was found outside near the dust collector (SC 18). The ash is hauled out to a local farm for fertilizer.

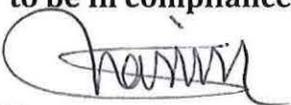
After a brief tour of the facility, Jerry provided me the most recent data compiled for fuel usage and the maintenance records for the boilers. They burned 1459 tons wood chips in last 164 days. The school uses around 8.89 tons wood chips per day when operating at full capacity.

Based on provided data it can be calculated that the benzo (a) pyrene emission from the wood-fired boiler is approximately 1.48 microgram per cubic meter which is less than 3.0 microgram per cubic meter set forth in the permit (SC 14).

Visible emissions from the wood boiler were not observed during the inspection day due to inclement weather condition. Jerry stated that the stack height is 85 feet and diameter of the stack is 6 inches. This satisfies the permit requirement set forth in SC19.

Jerry stated the natural gas-fired boiler #1 is run three hours per week for maintenance purposes.

Via onsite inspection, review of records, and discussion with staff, the facility appeared to be in compliance with the conditions of issued permit no. 93-90.


NAME _____

DATE 12/18/17

SUPERVISOR  _____