

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated Inspection**

M343037418

FACILITY: OAK HILL CEMETERY CO		SRN / ID: M3430
LOCATION: 255 SOUTH AVE, BATTLE CREEK		DISTRICT: Kalamazoo
CITY: BATTLE CREEK		COUNTY: CALHOUN
CONTACT: Debra Stanley , General Manager		ACTIVITY DATE: 10/31/2016
STAFF: Rex Lane	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On October 31, 2016, MDEQ-AQD staff arrived at Oak Hill Cemetery at 9:30 am to conduct an unannounced air quality inspection. The facility was last inspected by the AQD on 2/8/06 and was determined to be in compliance at that time. Staff made initial contact with Ms. Debra Stanley, General Manager and provided a business card and stated the purpose of their visit. The prior facility contacts, Mr. Richard Rowe and Mr. James Carroll both retired in 2011. Staff asked Ms. Stanley if either of the two crematories were in use this morning and she indicated that the older cremation unit (i.e. Power Pak Model IE 43) was currently in operation. Maintenance and cremation records are kept in the office. Ms. Stanley contacted the operator, Mr. Kenneth Prough, and staff drove into the cemetery and met him at the old unit.

Staff introduced themselves to Mr. Prough and he stated that the old crematory unit was started up at 8:50 am. Staff observed the crematory stack at 9:40 am and there was an obvious heat plume but no visible emissions were noted (see attached photos). Mr. Prough stated that the temperature readout to the right side of the control panel was about 100 degrees below the actual temperature. During staff observation, the temperature readout was 920 degrees F upon arrival and reached a maximum of 1209 degrees F. The old unit is permitted under PTI No. 6-78I which does not have a special condition for minimum afterburner temperature. The unit's afterburner operates for about thirty minutes in order to get up to temperature before the ignition and cremation burner can fire. The unit is equipped with an optical pollution monitoring system that is mounted in the stack that is set to alarm if visible emissions reach 20% opacity. The old crematory unit was down from late 2014 until it was repaired and started back up in early October 2016. Mr. Prough stated that the average cremation time in the old unit is about three hours in length.

Mr. Prough then took staff to the newer crematory unit (B & L Model N-20AA) that is three streets further south in the cemetery. The newer unit is down for repairs to fix the ignition and cremation burner block. Mr. Prough opened the door to the unit so staff could see where the burner block was in the chamber. He also turned on the unit temporarily so he could show staff that the afterburner combustion temperature on the control panel is pre-set to 1615 degrees F (see attached photo) which demonstrates compliance with PTI No. 271-99, special condition # 3. We went to the back side of the unit so staff could look at the pollution monitoring system eye (i.e. optomonitor) that is set in the exhaust stack and is set to alarm at 10% opacity. Staff smelled natural gas at this location and Mr. Prough indicated that the repair man was coming back tomorrow to finish the burner block repair and he would have him check for and repair any gas leaks. Mr. Prough stated that the average cremation time in the new unit is about three and a half hours in length.

Staff asked Mr. Prough about the types of containers used for cremations. Mr. Prough indicated that the majority of cremations are either done in a cardboard container or in a container with a wood particle board floor with a cardboard wall and top. There are still a few cremations that are done in a wood casket with a veneer finish. The facility performs about 900 cremations per year with about equal numbers conducted in the older vs. the newer unit. Staff thanked Mr. Prough for his time and then went back to the office to review records.

Ms. Stanley showed staff a paper cremation ledger which lists a cremation ID, deceased name, date and cause of death (if known), cremation date and name of funeral home handling arrangements. Ms. Stanley also showed staff a paper ledger that contained a summary of maintenance activities for both units. She then printed out maintenance/repair invoices for both units for 2015 and 2016 (see attached). Staff thanked Ms. Stanley for her time and left the facility at 10:15 am.

At the time of the inspection, it appears that the facility was in compliance with the requirements of PTI No. 6-78I and 271-99. -RIL

NAME RL DATE 11/1/16 SUPERVISOR MJ 11/2/2016