

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N376868195

FACILITY: PERRY MOUNT PARK CEMETERY		SRN / ID: N3768
LOCATION: 878 N PERRY ST, PONTIAC		DISTRICT: Warren
CITY: PONTIAC		COUNTY: OAKLAND
CONTACT: Danny Losee , President		ACTIVITY DATE: 07/10/2023
STAFF: Marie Reid	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled on-site inspection.		
RESOLVED COMPLAINTS:		

On July 10, 2023, I (Marie Reid) and Shamim Ahammod conducted a scheduled on-site inspection at Perry Mount Park Cemetery (SRN: N3768) located at 878 N Perry St, Pontiac, MI. The purpose of the inspection was to determine the company's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and the conditions of Permit to Install (PTI) Nos. 249-93 and 59-07.

Permit History

PTI No. 249-93 was approved on June 2, 1993, for the installation and operation of a J.A.R incinerator, Model A-50 (EUCREMATORY1).

PTI No. 59-07 was approved on March 20, 2007, for the installation and operation of the US Cremation Model Classic Human Crematory (EUCREMATORY2).

Inspection

On July 10, 2023, at 10:00 AM, I arrived at the facility with Shamim and were greeted by Danny Losee, President of Perry Mount Cemetery. We introduced ourselves, provided credentials, stated the purpose of the inspection, and then toured the facility.

Regulatory Analysis

PTI No. 249-93 — EUCREMATORY1

This permit does not have any monitoring or recordkeeping requirements.

Although this incinerator is permitted to incinerate Type 0 (trash) and Type 4 (human and animal remains) wastes, Perry Mount only incinerates human remains, according to Danny. This demonstrates compliance for SC 21.

This incinerator was operating at the time of the inspection. I walked outside the facility to view the stacks and did not notice any opacity. Danny told me that they check the stacks during every operation and has never noticed any visible emissions coming from the stack. Based on this information, an emission test to verify compliance with the emission limit in SC 15 has not been requested by the AQD. This demonstrates compliance for SC 16, which limits visible emissions to a 6-minute average of 20% opacity.

Danny stated that the incinerator has an interlock that prevents primary combustion chamber ignition until the secondary combustion chamber (thermal oxidizer) reaches 1550° F. This demonstrates compliance with SC 18 & 19, which requires the secondary combustion chamber to properly operate at a minimum of 1400°F. Danny said the J.A.R incinerator, Model A-50 did not have a read-out temperature when it was designed. When temperature reaches 1550°F, the secondary combustion chamber flame will turn on. There is no requirement to continuously monitor temperature in this permit.

Perry Mount is compliant with SC 20, which addresses the disposal of collected ash. The cremains are brought to a secondary processing area where they are grinded into a dust. This dust is transferred from the grinder to a box which is given to the family. The primary and secondary combustion chambers are operated by timers. The primary timer is located on the outside of the control panel and the secondary timer is on the inside of the control panel. Since this unit was operating, I observed that both timers were operational and that it had been operating for 2.5 hours and had 30 minutes until the cremation was complete.

Operating instructions posted near the incinerator indicate that the secondary timer should be set for at least 2 hours and the primary timer should be set for at least 3 hours, depending on charge size. I asked Danny why the operating instructions from the manufacturer say to turn off the secondary burner after 2 hours when SC 22 requires that the secondary combustion chamber is operating whenever the incinerator is operated. Danny informed me that the operating instructions from J.A.R are from the 1900s when the unit was installed, and they are contradictive of what is in the permit. Danny said he always sets the primary and secondary timers to operate for the same amount of time, so the secondary combustion chamber is always on while combusting waste. This verifies compliance with SC 22.

PTI No. 59-07 — EUCREMATORY2

Emission Limits

Special Condition (SC) 1.1 Limits PM to 0.20 lbs/1000 lbs gas calculated to 50% excess air. The furnace was not operating during this inspection. I walked outside the facility to view the stacks and did not notice any opacity. Danny told me that they check the stacks during every operation and has never noticed any visible emissions coming from the stack. Based on this information, an emission test to verify compliance with the emission limit in SC 1.1 has not been requested by the AQD.

Material Usage Limits

SC 1.2 States the permittee shall only burn pathological wastes in the incinerator. Danny stated that only human pathological wastes are burned at Perry Mount. I reviewed cremation records to confirm this.

Process/Operational Limits

S.C 1.3, 1.4, & 1.5. I reviewed the charts from the circular temperature recorder. The secondary combustion chamber achieves a minimum operating temperature of 1600°F. The chart data verifies compliance with Special Condition Nos. 1.3, 1.4, and 1.5. I did notice on the circular charts that when larger charges are burned later in the day, the secondary combustion chamber could reach up to 2250°F, but I did not notice temperatures exceeding 2500°F. The secondary combustion chamber operating between 1600°F and 2500°F indicate controlled and proper operation because temperatures greater than 2500°F may damage the thermocouple, increase the rate of combustion, and may reduce the secondary combustion chamber retention time to less than 1.0 seconds, which could result in visible emissions. Danny said they try to schedule heavier charges first, but they do not have a refrigeration unit for storing remains.

There is a list of operation and maintenance guidelines in this permit. I have addressed the list in the bullet points below.

Appendix A:

- Danny Losee is the certified operator for both cremation units.
- Grates are cleaned after every cremation. Since this unit was not operating, I was able to verify that the grates were cleaned. According to operational instructions that were posted on the wall, ash is removed by using a steel rake to pull ash into the lower hopper, which guides the cremains into the cremation pan. The cremains are then brought to a secondary processing area where they are grinded into a dust. This dust is transferred from the grinder to a box which is given to the family.
- Danny stated that the unit is preheated for at least 15 minutes.
- Cremation logs indicate that they do not overload the incinerator.
- Danny stated that the charge door is opened after 2 hours of operation to inspect the cremains and stoke (move) the cremains to ensure the cremation has been transformed to ash and any unburnt material is not encapsulated under the ash.
- According to the cremation logs, only human remains are burned.
- Danny stated that combustion air is adjusted according to manufacturer's instructions.
- Danny stated they checks the stack during every operation.
- I observed that daily operating instructions and a list of spare parts for U.S.100 Crematory is posted on the wall next to the incinerator.
- Danny regularly checks and repairs the incinerator and keeps a log of any maintenance done. Danny told me that either they will conduct the maintenance themselves or contract a third party.

Recordkeeping/Reporting/Notification

SC 1.6 & 1.7 Specifies recordkeeping requirements for EUCREMATORY2. The facility shall keep continuous secondary combustion chamber temperature data, and daily records of the time, description, and weight of waste combusted.

Continuous secondary combustion temperature records are maintained on circular temperature charts. The start time, stop time, description, and weight is noted directly on the circular chart for each cremation, which satisfies the minimum permitted recordkeeping requirements for charge description. Danny also records the type of container the remains were burned in:

WC means the pathological remains were contained in a wood casket,
SC means the pathological remains were contained in a steel container, and
CC means the pathological remains were contained in a corrugated cremation container.

Stack/Vent Restriction

SC 1.8 Specifies stack parameters. I did not verify stack parameters during this inspection.

Conclusion

Per this inspection, Perry Mount Park Cemetery is in compliance with the requirements of PTI Nos. 249-93 & 59-07.

NAME *Maui Reid*

DATE 7/26/2023

SUPERVISOR *K. Kelly*