

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

N376863729

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: 07/01/2022
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Conducted an onsite scheduled inspection of Perry Mount Park Cemetery (SRN: N3768) to determine the company's compliance with the requirements of the federal Clean Air Act and the conditions of Permit to Install (PTI) Nos. 249-93 and 59-07.		
RESOLVED COMPLAINTS:		

On July 1, 2022, the Michigan Department of Environment, Great Lakes and Energy (EGLE) -Air Quality Division (AQD) staff, I (Shamim Ahammod) conducted an onsite scheduled inspection of Perry Mount Park Cemetery (SRN: N3768) located at 878 N Perry St., Pontiac, Michigan. 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

- On June 2, 1993, PTI No. 249-93 was issued to Perry Mount Park Cemetery for the installation and operation of the J.A.R. incinerator, Model A-50 (EUCREMATORY1) to burn 200 pounds per hour of combined 0 (trash) and 4 wastes (human and animal).
- On March 20, 2007, PTI No. 59-07 was issued to Perry Mount Park Cemetery to operate the US Cremation Model Classic Human Crematory Natural Gas Fired (EUCREMATORY2).

Source Description

The facility provides only human cremation services. The facility is currently operating EUCREMATORY1 and EUCREMATORY2.

Rules and Regulations

- NSPS

Under 40 CFR Part 60, Pathological incinerators are considered exempt from the federal New Source Performance Standards (NSPS) for incinerators of any type, as long as the incinerators are burning 90% or more of pathological waste.

- NESHAP

The facility is an area source of HAP emissions. Part 63 Subpart EEE is for Hazardous Waste Combustors. The crematory is not permitted to burn hazardous waste, so it is not subject to this NESHAP.

Onsite Inspection

On July 2, 2022, at 11:10 AM, I arrived at the facility and was greeted by Danny Losee, President of Perry Mount Park Cemetery. I introduced myself, provided credentials, and stated the purpose of the inspection. Danny Losee and I toured the facility. At the time of inspection, EUCREMATORY1 was operating and EUCREMATORY2 was not operating. Emission units were labeled.

REGULATORY ANALYSIS

PTI No. 249-93 (J.A.R. incinerator, Model A-50, EUCREMATORY1)

This permit does not contain any monitoring or recordkeeping requirements.

Although this emission unit is permitted to incinerate Type 0 (trash) and Type 4 (human and animal remain) wastes, Perry Mount only incinerates human remains and does not incinerate any animal remains or trash, according to Mr. Losee. During my inspection, this incinerator was in operation.

Emission Limit**Per SC 15**

Pollutant	Limit	Period / Operating Scenario	Equipment
PM	0.20 lb/1000 lbs of gas ^a	Hourly	EUCREMATORY1

Per Special Conditions (SC) 15, 16, and 17, the Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. The AQD hasn't requested the facility to conduct any performance tests yet.

Per SC 18, the applicant shall not operate the incinerator unless the thermal oxidizer is installed and operating properly. The permittee has installed a secondary chamber of combustion (thermal oxidizer).

Per SC 19, the applicant shall not operate the incinerator unless a minimum temperature of 1400 degrees Fahrenheit and a minimum retention time of 0.25 seconds in the thermal oxidizer are maintained. According to Danny Losee, the incinerator has an interlock system that prevents primary burner ignition until the secondary combustion chamber reaches 1550 degrees Fahrenheit. This appears to demonstrate compliance with special condition no. 19, which requires the secondary combustion chamber to operate at a minimum of 1400 F. Danny Losee said the J.A.R. incinerator, Model A-50 did not have a read-out temperature when it was designed. When the temperature reaches 1550 F, the secondary combustion chamber flame will turn on.

Per special condition 20, at the time of inspection, I observed a tray of collected cremains that was cooling to room temperature. The cremains processing area appeared to be clean and properly maintained, which appeared to demonstrate compliance with this condition.

Per SC 21, the facility only burns type 4 waste. Per special condition 22, I observed that the incinerator was equipped with a manual timer switch which appears to meet the requirement of this condition.

PTI No. 59-07

The facility operates US Cremation Model Classic Human Crematory (EUCREMATORY2) under PTI No. 59-07.

The following conditions apply to EUCREMATORY2

Emission unit: EUCREMATORY2

Emission Limits

Pollutant	Limit	Time Period / Operating Scenario	Equipment
1. PM	0.20 lb/1000 lbs of gas ^a	Hourly	EUCREMATORY2

Per General Conditions (GC) 13, The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. AQD hasn't requested the facility for the PM emission test yet.

Per GC 11, The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**

- a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
- b) A visible emission limit specified by an applicable federal new source performance standard.
- c) A visible emission limit is specified as a condition of this permit for installation.

At the time of inspection, EUCREMATORY2 was not in operation.

Material Limits

Per SC 1.2, based on their records, it appears the permittee does not burn any waste in EUCREMATORY2 other than pathological wastes.

Per SC 1.6, The permittee shall keep, in a satisfactory manner, daily records of the time, description, and weight of waste combusted in EUCREMATORY2, as required by SC 1.2. The permittee maintains the daily records of the time, description, and weight of the waste combusted in the temperature log chart. Per Appendix A.4, do not overload the incinerator. Stay within the given loading rates (750 Pound Maximum Charge) and follow the manufacturer's instructions. At the time of inspection, I reviewed daily records and found the weight of waste combusted in the crematory 2 was less than 750 pound per charge.

Process/Operational Restrictions

Per SC 1.3, the permittee shall not combust waste in EUCREMATORY2 unless a minimum. the temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber is maintained. During my inspection, EUCREMATORY2 was not in operation. Per SC 1.5, the permittee shall install, calibrate, maintain and operate satisfactorily a device to monitor and record the temperature in the secondary combustion chamber of EUCREMATORY2 continuously. During my inspection, I reviewed the daily combustion temperature records and found the daily continuous secondary combustion temperature was above than 1600-degree F while the cremation unit was being operated. In my last inspection on July 16, 2021, I issued a violation to the facility for not having a temperature recording device (chart recorder). The permittee has fixed this issue. Therefore, the VN will be resolved.

SC 1.4, the incinerator shall be installed, maintained, and operated satisfactorily to control emissions from EUCREMATORY2.

A list of recommended operating and maintenance procedures is specified in Appendix A. Incinerator Operation and Maintenance Guidelines, and reviewed below:

1. Designate a trained operator for the unit and make that person responsible for compliance with the air pollution control requirements.
 - Danny Losee is a certified operator.
2. Clean grates before each day's operation (more often if necessary) and dispose of the ashes properly.

- Danny Losee said, grates are cleaned regularly, and ashes are disposed of properly. During the inspection, the unit was operating. Therefore, I was unable to verify whether the grates are cleaned regularly.
3. Preheat the unit with the burners (not with waste) for at least 15 minutes.
 - Danny Losee said they preheat the unit with the burners for at least 15 minutes.
 4. Do not overload the incinerator. Stay within the given loading rates and follow the manufacturer's instructions.
 - Explained in SC 1.6.
 5. Schedule charges to minimize opening the charging door as infrequently as possible. Opening the charging door lets cold air in and quenches the fire causing smoke.
 - Danny Losee said they don't open the charging door after starting the equipment.
 6. Burn only the type of waste that the incinerator has been approved to burn. Follow the manufacturer's instructions to maximize the efficiency of the unit, and to properly burn the waste (s).
 - Explained in SC 1.2.
 7. Keep the combustion air-adjusted according to the manufacturer's instructions.
 - Danny Losee said they maintain the combustion air-adjusted according to the manufacturer's instructions.
 8. Observe the stack frequently and adjust the operation as necessary to eliminate smoke and fly ash.
 - Danny losee said, they observe the stack periodically.
 9. Post a copy of the manufacturer's manual and this Guideline near your incinerator.
 - A copy of the manufacturer's manual was posted near the incinerator.
 10. Make quarterly inspections to check and service all of the equipment. If a qualified person is not available for proper inspections, a service contract with a reputable manufacturer is advisable.
 - At this inspection, Danny Losee said they regularly check and repair the equipment and maintain records. If needed, they hire a third party to check and repair the equipment. Perry Mount Cemetery Park has hired J.A.R Incinerator Service Inc. to repair and replace the damaged parts. I reviewed the J.A.R Incinerator Service Inc. invoices and found the following maintenance records:
 - On June 15, 2021 (Invoice #14354), Stainless steel brushes were used to clean the hearth of each individual cycle for both units.
 - On August 24, 2021(Invoice #14622), Stainless steel brushes were used to clean the hearth of each individual cycle for both units.

- On August 31, 2021 (Invoice #20298), Censoring temperatures in both units. The thermostat was checked.
- On December 2, 2021 (Invoice #14895), Stainless steel brushes were used to clean the hearth of each individual cycle for both units.
- On January 17, 2022 (Invoice #20640), the facility checks simple cardboard rollers to ensure that each cremation loads into the chambers with the least amount of difficulty. Simple cardboard rolls about 2 inches in diameter and 12 inches in length. The roller is used to aid in the placement of the casket during the loading process. It helps to ensure the casket can enter the hot chamber as easily as possible, without them, the load may get caught on a refractory edge or lip. For the purpose of both operator safety and speed of loading to lessen the possibility of internal or external smoke emissions, these rollers are used.
- On 10/12/2021, Perry Mount removed fallen refractory and insulation, installed a combination of hard fire brick and castable refractory along with insulation to rebuild the interior wall, and installed steel patch exterior steel.
- On 12/14/2021, Perry Mount removed a broken hearth tile from unit #1 and installed a new hearth tile on unit#1.
- On 1/18/2022, Perry Mount removed a broken curtain wall from the secondary chamber on unit #1, removed secondary chamber roof refractory and insulation, constructed wood form to hold roof castable cement, welded stainless hangers to roof exterior steel, installed form, and pour roof using approximately 1700 lbs castable, constructed bridge wall and curtain wall using fire brick and mortar.
- On 3/7/2022, Perry Mount constructed wood forms to replace the primary chamber roof on unit#1, removed the remaining primary roof refractory including charging door lintel, installed wood forms and steel hangers to hold the castable roof, poured and placed 4000 lbs castable refractory in the roof and side walls and installed new roof steel for the primary chamber.
- On 5/10/2022, Perry Mount cleaned and adjusted spark rod assemblies on the primary burners of unit #1 and checked burners for proper operation.
- On 6/7/2022, Perry Mount replaced the motor start on unit#1 and replaced the motor on the combustion air blower.

In my last inspection on 07/16/2021, I issued a violation notice to the facility for not having the maintenance records. At this inspection, I verified that the permittee had maintenance records. Therefore, the VN will be resolved.

Stack/Vent Restrictions

Per SC 1.8, at the time of inspection, the exhaust stacks appeared vertical and unobstructed. SVCREMATORY2 stack appeared to be at least 18 feet above ground in height.

Conclusion

Based on the on-site inspection, it appears Perry Mount Park Cemetery complies with the requirements of PTI No. 249-93 and PTI No. 59-07.

NAME Shamim Ahammod

DATE 17 August 2022 SUPERVISOR *K. Kelly*