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

P111262155

FACILITY: Mayzie, Inc. dba Pet Passag	SRN / ID: P1112			
LOCATION: 4577 Lapeer Road, ORIOI	DISTRICT: Warren			
CITY: ORION TWP		COUNTY: OAKLAND		
CONTACT: Chris Mires , Owner		ACTIVITY DATE : 02/25/2022		
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR		
SUBJECT: Conducted an onsite scheduled inspection of Mayzie dba Pet Passages to determine the company's compliance with the requirements of Permit to Install (PTI) No. 22-20 for the animal crematory.				
RESOLVED COMPLAINTS:				

On February 25, 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 Mayzie dba Pet Passages (SRN: P1112) located at 4577 South Lapeer Road, Unit I, Orion TWP, 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) No. 22-20 for the animal crematory.

Permit History

On June 2, 2020, PTI No. 22-20 was issued to Mayzie dba Pet Passages for the installation and operation of EUCREMATORY1.

Source Description

Mayzie dba Pet Passages provides animal cremation services. This facility is a true minor source for hazardous air pollutant (HAPs) and Criteria Pollutants.

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.

Inspection Arrangement

Due to the COVID-19 pandemic, I prearranged this announced inspection for February 25, 2022.

Onsite Inspection

On February 25, 2022, at 1:50 PM, I arrived at the facility and was greeted by Mr. Chris Mires, Owner of Mayzie dba Pet Passages. I introduced myself, provided credentials, and stated the purpose of the inspection. At the time of inspection, EUCREMATORY1 was in operation. I did not observe any emissions from the stack.

REGULATORY ANALYSIS

The crematory (EUCREMATORY1) unit is a US Cremation, model USB20 (aka Sierra 500). It is natural gas-fired and operates at 150 lbs/hr with a maximum load of 500 lbs. This will be the only cremation unit at the facility at this time

Pollution Control Equipment

Secondary combustion chamber with afterburner

Emission Limits

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

Per General conditions (GC) 13, 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 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 specified as a condition of this permit to install.

At the time of inspection, EUCREMATORY1 was in operation, I observed zero percent opacity from the stack.

Rule 331-Particulate Emissions

Pathological incinerators are listed in Table 31 of Rule 331. These incinerators have an emission limit of 0.2 lbs/1,000 lbs gas, corrected to 50% excess air, and a requirement to use an afterburner or other approved equivalent equipment. During the permit evaluation, the AQD calculations for this crematory unit indicate compliance with the emission limit. The unit is equipped with a secondary combustion chamber and afterburner. The secondary combustion chamber shall have a minimum of one second retention time at a minimum of 1600°F. The unit should remain in compliance with Rule 331 when properly operated and maintained.

Material Limits

Per SC II.1, I reviewed the record from January 2021 to January 2022 and found the permittee does not burn any waste in EUCREMATORY1 other than pathological wastes. Per SC II.2, the permittee shall not charge more than 500 pounds per charge in

EUCREMATORY1. Per SC VI.3, the permittee shall keep, satisfactorily, daily records of the time (duration of burn), description, and weight of charge combusted in EUCREMATORY1. I reviewed the daily records from January 2021 to January 2022 and found the permittee maintains the daily records of the time, description, and weight of charge combusted in

EUCREAMATORY1. Based on the record, it appears the permittee does not charge more than 500 pounds in the primary chamber in EUCREMATORY1. Per SC IV.3, I observed permittee maintains a scale at the facility to verify the charge weight. The permittee received an violation notice (VN) for not having a scale during the previous inspection. I will resolve the VN since they now have a scale.

Per SC II.3, based on the 'Consumers Energy' report, it appears the permittee burns only pipeline natural gas in EUCREMATORY1.

Process/Operational Restrictions

Per SC III.1, the permittee shall not combust waste in EUCREMATORY1 unless a minimum temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chambers are maintained. Based on the cremation log chart, it appears the permittee combusts waste in EUCREMATORY1 at or above the temperature of 1600°F in the secondary combustion chambers. Per SC VI.2, the permittee shall monitor and record the temperature in the secondary combustion chamber of EUCREMATORY1 continuously. At the time of inspection, I reviewed the cremation log data and found the permittee monitors and records the temperature in the secondary combustion chamber of EUCREMATORY1 continuously. During my inspection, I noted the temperature in the secondary combustion chamber of EUCREMATORY1 was 1673°F.

Per SC III.2, the incinerator shall be installed, maintained, and operated in a manner satisfactory to the AQD District Supervisor to control emissions from EUCREMATORY1. 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.
- Mr. Mires is the certified operator.
- 2. Clean grates before each day's operation (more often if necessary) and dispose of the ashes properly.
- Mr. Mires said, grates are cleaned regularly.
- 3. Do not combust waste until the secondary combustion chamber (afterburner) is at or above the minimum required temperature. This temperature must be maintained for the duration of the burn cycle.
- Explained in SC III.1 (Process/operation restrictions).
- 4. Do not overload the incinerator. Stay within the given loading rates and follow the manufacturer's instructions.
- Explained in SC VI.3 and II.2.
- 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.
- Mr. Mires said they don't open the charging door after starting the equipment.
- 6. Burn only the type of wastes 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 II.1.
- 7. Keep the combustion air-adjusted according to the manufacturer's instructions.
 - Explained in IV.1 and VI.6.

- 8. Observe the stack frequently and adjust the operation as necessary to eliminate smoke and fly ash.
- At the time of inspection, I did not observe any smoke or fly ash from the stack. According to Mr. Mires, 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.
 - Explained in SC IV.1 and VI.6.

Design/Equipment Parameters

Per SC IV.1, a secondary combustion chamber with an afterburner is installed. A copy of the manufacturer's manual is posted near the incinerators. Per SC VI.6, the permittee shall keep, in a satisfactory manner, a record of all service, maintenance, and equipment inspections for EUCREMATORY1. The record shall include the description, reason, date, and time of the service, maintenance, or inspection. This equipment was installed in June 2020. The permittee performed an annual inspection on a US Cremation, model USB20 (EUCREMATORY1) on July 14, 2021. Mr. Mires sent me the annual inspection evaluation form and I reviewed it. Based on reports, it appears the permittee is not required to repair any parts of the crematory at this moment.

Per SC IV.2, the permittee shall install, calibrate, maintain, and operate satisfactorily a device to monitor and record the temperature in the secondary combustion chamber for EUCREMATORY1 continuously. At the time of inspection, I saw the secondary combustion chamber temperature monitoring device. More details in SC III.1.

Per SC IV.3, during my inspection, I observed the permittee maintains a scale at the facility to verify the charge weight. More details in SC II.2.

Testing/sampling

NA

Monitoring/Recordkeeping

The permittee has provided the required record-keeping information per SC VI.1 through SC VI.6. The compliance status of the record-keeping requirements has been evaluated in Sections I through IV.

Stack/Vent Restrictions

Per SC VIII.1, at the time of inspection, the exhaust stacks appeared vertical and unobstructed. SVCREMATORY1 stack appeared to be at least 23 feet above ground in height.

Other Requirements

NA

Conclusion

Based on the on-site inspection and review of the records, it appears Mayzie dba Pet Passages complies with PTI No. 22-20.

K. Kelly

NAME Shamim Ahammod

DATE 3/17/22

SUPERVISOR