

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

N649459539

<b>FACILITY:</b> UNION LAKE VETERINARY HOSPITAL		<b>SRN / ID:</b> N6494
<b>LOCATION:</b> 1494 LOCHAVEN, WATERFORD		<b>DISTRICT:</b> Warren
<b>CITY:</b> WATERFORD		<b>COUNTY:</b> OAKLAND
<b>CONTACT:</b> Annette Engler , Administrator		<b>ACTIVITY DATE:</b> 07/29/2021
<b>STAFF:</b> Shamim Ahammod	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b>
<b>SUBJECT:</b> Conducted an onsite scheduled inspection of Union Lake Veterinary Hospital (N6494).		
<b>RESOLVED COMPLAINTS:</b>		

On July 29, 2021, Michigan Department of Environment, Great Lakes and Energy (EGLE) -Air Quality Division (AQD) staff, I (Shamim Ahammod) conducted an onsite scheduled inspection of Union Lake Veterinary Hospital (N6494) located at 1494 Lochaven, Waterford, 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. 183-09 for the animal crematory.

The equipment of this facility is located at 1492 Lochaven Road, Waterford, Michigan.

### Permit History

On September 30, 2009, PTI No. 183-09 was issued to Union lake Veterinary Hospital for the installation and operation of EUCREMATORY.

### Source Description

Union Lake Veterinary Hospital provides animal cremation services. This facility is a true minor source for 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 July 29, 2021.

### Onsite Inspection

On July 29, 2021, at 2 PM, I arrived at the facility and was greeted by Ms. Annette Engler, Administrator of Union Lake Veterinary Hospital Cremation services. I introduced myself, provided credentials, and stated the purpose of the inspection. At the time of inspection, EUCREMATORY was in operation. I did not observe any emissions from the stack.

### REGULATORY ANALYSIS

The crematory (EUCREMATORY) unit is a Matthews Cremation Division Power Pak Jr., model IE43-PPJ). It is natural gas-fired and operates at 75 lbs/hr with a maximum load of 300 lbs. This will be the only cremation unit at the facility at this time

Pollution Control Equipment

Secondary combustion chamber with afterburner

### Emission Limits

Pollutant	Limit	Period / Operating Scenario	Equipment
1. PM	0.20 lb/1000 lbs of gas <sup>a</sup>	Hourly	EUCREMATORY

Per General Condition (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, EUCREMATORY was in operation. I did observe zero percent opacity from the stack.

### Material Limits

Per SC II.1 and SC II.2, the permittee shall not burn any waste other than pathological wastes and shall not charge more than 300 pounds per charge in EUCREMATORY.,

Per SC VI.2, the permittee shall keep, satisfactorily, daily records of the time (duration of burn), description and weight of charge combusted in EUCREMATORY, as required by SC II.1 and SC II.2. I reviewed the daily records and found the permittee maintains the daily records of the time, description, and weight of charge combusted in EUCREMATORY. Based on the records, it appears the permittee does not burn any waste in EUCREMATORY other than pathological wastes and does not charge more than 300 pounds per charge in EUCREMATORY.

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

### Process/Operational Restrictions

Per SC III.1, the permittee shall not combust waste in EUCREMATORY 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 EUCREMATORY when the secondary combustion chamber temperature is at or above the temperature of 1600°F. At the time of inspection, I noted the secondary combustion chamber temperature was 1650°F at the digital temperature control device.

Per SC VI.1, the permittee shall monitor and record the temperature in the secondary combustion chamber of EUCREMATORY continuously. At the time of inspection, I observed the cremation temperature log data and found the permittee monitors and records the temperature in the secondary combustion chamber of EUCREMATORY continuously.

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

1. Designate a trained operator for the unit and make that person responsible for compliance with the air pollution control requirements.
  - Ms. Annette Engler and Kirk Grant are certified operators for the unit. Ms. Engler sent her Cremator Operator Training certificate and she is the responsible person for compliance with the air pollution control requirements.
2. Clean grates before each day's operation (more often if necessary) and dispose of the ashes properly.
  - Incinerator was in operation at the time of inspection. Ms. Engler said, they clean grates after each use.
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.2 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. According to Ms. Engler, they do not open the door until the cycle is complete.
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. According to Ms. Engler, they keep 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.
  - At the time of inspection, I did not observe any smoke or fly ash from the stack. According to Ms. Engler, they observe the stack frequently and adjust the operation as necessary to eliminate smoke and fly ash. The permittee has an opacity monitor according to Ms. Annette.
9. Post a copy of the manufacturer's manual and this Guideline near your incinerator.
  - A copy of the manufacture's manual was posted near the incinerator. At the time of inspection, I did not see the "Incinerator Operation and Maintenance Guidelines (Appendix A)" posted near the incinerator. I advised them to post Appendix A 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.

- According to Ms. Engler, Mr. Grant makes quarterly inspections to check and service all of the equipment and Matthews does an annual service and inspection.
- Per SC III.2 (Appendix A, 10), On January 27, 2020, EUCREMATORY was inspected by Tate Spaulding, Technician of Matthews International Cremation Services. Based on this inspection report, Matthews International Cremation Services has repaired the crematory's throat roof on 5/18/2020. Since the Matthews International Cremation Services has not kept the records, they provided a certified letter stating the date of inspection, type of work done, and the date of work done.

Per SC IV.1, the permittee has installed a secondary combustion chamber with an afterburner.

### Testing/sampling

NA

### Monitoring/Recordkeeping

The permittee has provided the required record-keeping information per SC VI.1 through SC VI.3. 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. SVCREMATORY stack appeared to be at least 19 feet above ground in height.

### Other Requirements

NA

### Conclusion

Based on the on-site inspection and review of the records, it appears Union Lake Veterinary Hospital complies with the requirements of PTI No. 183-09.

NAME 

DATE 08/26/2021

SUPERVISOR 