

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

N754868052

FACILITY: DETROIT WILBERT CREMATION SERVICES EAST, LLC		SRN / ID: N7548
LOCATION: 44481 GROESBECK HWY, CLINTON TWP		DISTRICT: Warren
CITY: CLINTON TWP		COUNTY: MACOMB
CONTACT: Chris Gordon , Manager		ACTIVITY DATE: 06/15/2023
STAFF: Marie Reid	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled on-site inspection.		
RESOLVED COMPLAINTS:		

On June 15, 2023, I (Marie Reid) and Shamim Ahammod conducted a scheduled on-site inspection at Detroit Wilbert Cremation Services (SRN: N7548) located at 44481 North Groesbeck Hwy, Clinton Township 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. 23-22, 33-14, 151-06, 296-05A.

Permit Information

PTI No. 23-22 was approved March 1, 2022, for the installation and operation of Matthew Environmental Solutions Power Pak II Plus (IE43-PPII Plus) for human cremation (EUCREMATORY04).

PTI No. 33-14 was approved on March 18, 2014, for the installation and operation of Matthews cremation division power Pak II Plus (IE43-PPII Plus) for human cremation (EUCREMATORY2).

PTI No. 151-06 was approved May 16, 2006, for the installation and operation of B&L cremation Systems, Inc. Model BLP-500/150 for pet cremation (EUPETCREMATORY).

PTI No. 296-05A was approved on December 3, 2007, for the installation and operation of Matthews cremation division power Pak II Ultra for human cremation (EUCREMATORY).

Inspection

I arrived at the facility Thursday, June 15, 2023, at 10:00 AM with Shamim. We entered the facility and were greeted by Chris Gordon, Manager of Detroit Wilbert Cremation Services. We introduced ourselves, provided identification, discussed the purpose of the inspection, and then toured the facility.

PTI No. 23-22 – EUCREMATORY04 (human)

I was informed by Chris Gordon that they had not yet received the incinerator covered under PTI 23-22 from Matthews Environmental Solutions due to supply chain issues related to COVID-19. General Condition (GC) 2. States, "If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install."

Since this permit was approved March 1, 2022, the permittee has until September 1, 2023, to commence installation of the incinerator covered under this permit before it is void. The permittee must notify the contacts listed in GC 2 if they will not be installing this equipment within 18 months, or if they wish to modify this permit.

PTI No. 33-14 – EUCREMATORY2 (human)

EMISSION LIMITS

Special Condition (SC) I.1: Limits PM to 0.20 lbs/1000 lbs gas calculated to 50% excess air. EUCREMATORY2 was operating at time of inspection. Detroit Wilbert Cremation Services use a closed-circuit TV to visually monitor opacity for all three stacks. I did not observe any visible emissions during the inspection; therefore, an emission test to verify compliance with the emission limit in SC I.1 has not been requested by the AQD.

MATERIAL LIMITS

SC II.1 States the permittee shall only burn human pathological wastes and associated materials in the incinerator. Chris stated that only human pathological wastes are burned. Cremation records confirmed EUCREMATORY2 only burns human pathological waste and associated materials.

SC II.2 Limits the charge size of each cremation to 750 lbs. I did not see any charges larger than 750 lbs when reviewing cremation records.

SC II.3 States that only natural gas shall be used to fuel EUCREMATORY2. Chris stated that only natural gas is used in all the furnaces. I did not see any evidence for other fuels being used.

PROCESS/OPERATIONAL RESTRICTIONS

SC III.1 States the permittee shall not combust waste in the incinerator unless a minimum temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained. The control panel on the machine and circular temperature recorder both indicated the furnace was operating at 1650° F during the inspection.

SC III.2 Requires that the incinerator be installed, maintained, and operated in a satisfactory manner to control emissions. While reviewing circular temperature charts, I did not notice any cases of this unit operating below the minimum temperature at 1600°F. I did not see any visible emissions on the live camera feed or smell any odors while the unit was operating during this inspection. I did not see any evidence to indicate that the incinerator was not operated or maintained in a satisfactory manner.

APPENDIX A

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

- A trained operator, Chris Gordon, is responsible for compliance with the air pollution control requirements.
- Grates are cleaned prior to each cremation & ashes are given to the family of the deceased.
- Waste appears to be combusted according to the minimum secondary combustion chamber temperatures specified in this permit.

- The incinerator is not overloaded. Charge size stays within the given loading rates and follow manufacturer's instructions.
- Charge door is only opened to briefly check on the cremation process, if at all.
- Only human remains are combusted in EUCREMATORY2.
- Chris said combustion air is adjusted according to manufacturer's instructions.
- Stacks are observed during every cremation. Detroit Wilbert Cremation Services use a closed-circuit TV to visually monitor opacity for all three stacks.
- A copy of the manufacturer's manual is located in the office near the incinerators. A copy of the manufacturer's manual is printed out for new employee training.
- Detroit Wilbert Cremation Services contracts Matthew's Environmental Solutions for inspections.
- Detroit Wilbert Cremation Services follows the manufacturer's operation and maintenance guidelines.

DESIGN/EQUIPMENT PARAMETERS

SC IV.1 Requires that the permittee install, calibrate, maintain, and operate a device to monitor and record the temperature in the secondary combustion chamber in a satisfactory manner. This machine is equipped with a chart recorder, which I verified was calibrated correctly. I observed that while the furnace was operating at 1650°F, the circular chart recorder was outputting 1650°F. I reviewed circular temperature records and confirmed that the chart recorder continuously records secondary combustion temperature.

SC IV.2 States that the permittee shall maintain a scale at the facility for the purpose of verifying the charge weight. I verified that the facility maintains a scale to verify charge weight.

MONITORING/RECORDKEEPING

SC IV.1-IV.6 Specifies recordkeeping requirements for EUCREMATORY2. The facility must keep maintenance records, continuous secondary combustion chamber temperature data, and a description of each cremation.

Continuous secondary combustion temperature records are maintained on circular charts. The start time, stop time, name, weight, and date is noted on the circular chart for each cremation, which satisfies the minimum recordkeeping requirements for charge description. Daily cremation records of the time, description, and weight are also maintained.

Calendar quarter basis records of when pathological waste is burned are maintained. Only pathological waste is burned in EUCREMATORY2. Chris emailed me all maintenance records since the past inspection in August 2022. I confirmed that records of all service, maintenance, and equipment inspections are kept in a satisfactory manner. I verified with Chris that extra thermocouples are kept onsite.

STACK/VENT RESTRICTIONS

SC VIII.1 Specifies stack parameters. I did not verify stack parameters during this inspection.

PTI 151-06 – EUPETCREMATORY (animal)

Emission Limits

SC 1.1: Limits PM to 0.20 lbs/1000 lbs gas calculated to 50% excess air.

EUPETCREMATORY was not operating at time of inspection. Chris uses a closed-circuit TV to visually monitor opacity for all three units. I did not observe any visible emissions

during the inspection; therefore, 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. Chris stated that only animal pathological wastes are burned. I reviewed cremation logs with charge waste description and confirmed EUPETCREMATORY only burns animal pathological waste.

Process/Operational Limits

SC 1.3 States the permittee shall not combust waste in EUPETCREMATORY unless a minimum temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained. EUPETCREMATORY was not operating during the inspection.

Circular temperature charts indicate that EYPETCREMATORY has been running below 1600°F (ranging from 1500°F to 1550°F) since February 2023, due to a damaged air actuator in the secondary combustion chamber. Chris says he immediately ordered a replacement air actuator in February, but only received it within the past few weeks due to COVID-19 supply chain issues. The damaged actuator caused the secondary combustion chamber burner to rapidly turn on and off, increasing gas usage, and creating an oscillating pattern on the circular temperature charts. Chris stated that he lowered the secondary combustion chamber temperature because he thought the minimum temperature EUPETCREMATORY could operate at was 1400°F. This constitutes a violation of PTI 151-06, EUPETCREMATORY, 1.3. This violation shall be cited in a violation notice.

Once we explained to Chris that the minimum operating temperature of the secondary combustion chamber is 1600°F, he immediately walked us back to EUPETCREMATORY and changed the operating temperature to 1650°F to be compliant with SC 1.3. At the time of the inspection, the actuator had not been replaced. Chris stated that he wanted to replace it that morning but did not want to be performing maintenance on the unit at the time of the inspection.

SC 1.4 Requires that the incinerator be installed, maintained, and operated in a satisfactory manner to control emissions. Due to the issue noted above in SC 1.3, the facility is not in compliance with this condition. The facility must allow this furnace to reach a minimum secondary combustion chamber temperature of 1600°F prior to cremation to control emissions in a satisfactory manner. This violation shall be cited in a violation notice.

APPENDIX A

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

- A trained operator, Chris Gordon, is responsible for compliance with the air pollution control requirements.
- Grates are cleaned prior to each cremation & ashes are given to the family of the deceased.
- Burners are preheated for at least 15 minutes before waste is charged.
- The incinerator is not overloaded. Charge size stays within the given loading rates and follow manufacturer's instructions.
- Charge door is only opened to briefly check on the cremation process, if at all.
- Only animal remains are combusted in EUPETCREMATORY.

- The combustion air was not adjusted to the manufacturer's instructions due to the damaged air actuator in the secondary combustion chamber. This violation shall be cited in a violation notice.
- Stacks are observed during every cremation. Detroit Wilbert Cremation Services use a closed-circuit TV to visually monitor opacity for all three stacks.
- A copy of the manufacturer's manual is located in the office near the incinerators. A copy of the manufacturer's manual is printed out for new employee training.
- Detroit Wilbert Cremation Services contracts Matthew's Environmental Solutions for inspections.

Monitoring

SC 1.5 Requires that the permittee shall install, calibrate, maintain, and operate a device to monitor and record the temperature in the secondary combustion chamber. This machine is equipped with a chart recorder. I reviewed the circular chart recorder records and confirmed temperature is continuously monitored.

Recordkeeping/Reporting/Notification

SC 1.6 & 1.7 Specifies recordkeeping requirements for EUPETCREMATORY. 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 on the circular chart for each cremation, which satisfies the minimum recordkeeping requirements for charge description.

STACK/VENT RESTRICTIONS

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

PTI 296-05A – EUCREMATORY (human)

Emission Limits

Special Condition (SC) I.1: Limits PM to 0.20 lbs/1000 lbs gas calculated to 50% excess air. EUCREMATORY2 was operating at time of inspection. Chris uses a closed-circuit TV to visually monitor opacity for all three units. I did not observe any visible emissions during the inspection; therefore, an emission test to verify compliance with the emission limit in SC I.1 has not been requested by the AQD.

Material Usage Limits

SC 1.2 States the permittee shall only burn pathological wastes. Chris stated that only human pathological wastes are burned. I reviewed cremation logs and confirmed EUCREMATORY only burns human pathological waste.

Process/Operational Limits

SC 1.3 States the permittee shall not combust waste unless a minimum temperature of 1400°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained. The furnace was operating at 1650°F at the time of the inspection.

I reviewed temperature records from circular charts and confirmed the permittee combusts waste above the minimum temperature of 1400°F. Chris stated that the attempt to reduce fuel consumption by running at 1400°F is offset by an increase of time it takes to fully cremate the remains. Therefore, Chris elects to operate EUCREMATORY at 1650°F.

SC 1.4 Requires that the incinerator is installed, maintained, and operated in a satisfactory manner to control emissions from EUCREMATORY. While reviewing circular temperature charts, I did not notice any cases of this unit operating below the minimum temperature at 1400°F. I did not see any visible emissions on the live camera feed or smell any odors while the unit was operating during this inspection. I did not see any evidence to indicate that the incinerator was not operated or maintained in a satisfactory manner.

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- Grates are cleaned prior to each cremation & ashes are given to the family of the deceased.
- Burners are preheated for at least 15 minutes before waste is charged.
- The incinerator is not overloaded. Charge size stays within the given loading rates and follow manufacturer's instructions.
- Charge door is only opened to briefly check on the cremation process, if at all.
- Only human remains are combusted in EUCREMATORY.
- Chris said combustion air is adjusted according to manufacturer's instructions.
- Stacks are observed during every cremation. Detroit Wilbert Cremation Services use a closed-circuit TV to visually monitor opacity for all three stacks.
- A copy of the manufacturer's manual is located in the office near the incinerators. A copy of the manufacturer's manual is printed out for new employee training.
- Detroit Wilbert Cremation Services contracts Matthew's Environmental Solutions for inspections.

Monitoring

SC 1.5. Requires that the permittee shall install, calibrate, maintain, and operate a device to monitor and record the temperature in the secondary combustion chamber. This machine is equipped with a chart recorder. I reviewed the circular chart recorder records and confirmed temperature is continuously monitored.

Recordkeeping/Reporting/Notification

SC 1.6 & 1.7 Specifies recordkeeping requirements for EUCREMATORY. 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 on the circular chart for each cremation, which satisfies the minimum recordkeeping requirements for charge description.

Stack/Vent Restrictions

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

Conclusion

At the time of this inspection Detroit Wilbert Cremation Services, LLC is in violation of PTI No. 151-06, EUPETCREMATORY, SC 1.3, SC 1.4, and SC 1.4 Appendix A No. 7. A

violation notice will be sent to the facility to address these issues. The compliance issues at Detroit Wilbert Cremation Services are summarized below.

EUPETCREMATORY: Combustion air was not adjusted according to the manufacturer's instructions due to a damaged air actuator in the secondary combustion chamber. Waste was combusted below the permitted minimum temperature of 1600°F in the secondary combustion chamber. This means that the incinerator was not operating in a satisfactory manner to control emissions.

NAME Mark Red

DATE 7/14/2023

SUPERVISOR K. Kelly