

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

P114572300

FACILITY: Alta Cremation and Services Inc.		SRN / ID: P1145
LOCATION: 13425 Capital Street, OAK PARK		DISTRICT: Warren
CITY: OAK PARK		COUNTY: OAKLAND
CONTACT: Kenneth Allen Sr. , Owner		ACTIVITY DATE: 06/20/2024
STAFF: Marie Reid	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY24 scheduled on site inspection		
RESOLVED COMPLAINTS:		

On June 20, 2024, I (Marie Reid), Michigan Department of Environment of Great Lakes, and Energy – Air Quality Division (EGLE – AQD), conducted a scheduled inspection of, Alta Cremation and Services Inc. (Alta) (SRN: P1145) located at 13425 Capital Street, Oak Park, MI. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); Michigan Administrative Rules; and Permit to Install (PTI) No. 115-20.

I arrived at Alta Cremation at 9:45 am and I did not observe visible emissions coming from the stack or fallout in the parking lot. I entered the facility and met with Kenneth Allen Senior, Owner. I identified myself and stated the purpose of the inspection. Kenneth gave me a tour of the facility and provided records. I reviewed the provided records at the facility during the inspection.

Facility Description

Alta is a crematory located in a high population density area in Oakland County. It is adjacent to industrial properties and office buildings. Residential dwellings are located a few hundred feet to the west, across Coolidge Highway. There is no history of complaints against this source.

Alta's permit allows for the operation of one Phoenix II-3 model cremation unit manufactured by B&L Cremation Systems Inc (EUCREMATORY1). The maximum charge weight is 1,000 pounds, burn rate is 150 pounds per hour, and the charge type is human remains. I checked the nameplate on the cremation unit to verify this information. This facility is a true minor source for particulate matter (PM).

Kenneth said he is currently the one conducting cremations at the facility. Kenneth said they rarely operate the cremation unit, and they operate on an as needed basis. According to the records, Alta has only had nine cremations between March 20, 2024, and June 20, 2024. The last cremation was on June 13, 2024, with a 143 lb charge.

Previous Violation Notice

On July 11, 2023, Alta received a violation notice (VN) for the failure to properly operate the cremation unit and afterburner in a satisfactory manner (SC III.2 and SC IV.1). The cremation unit shut down before the cremation was complete. Two hours after the unit shut down, the operator noticed the waste was not fully combusted, which required them to turn the unit back on to finish the cremation. While the cremation unit was off, the charge was still combusting waste from the residual heat while the afterburner was off and not controlling emissions from the cremation system.

Kenneth said they add 30 minutes to the cremation timer for all cremations. He also checks inside the primary chamber towards the end of each cremation to determine if he should

extend the cremation time to fully combust the waste. Based on the results of this inspection, this violation will be resolved.

Inspection & Compliance Evaluation

EUCREMATORY1

Emission Limits

The facility is limited to 0.20 lb/1000 lbs of gas of PM on an hourly basis in EUCREMATORY1 (SC I.1). The cremation unit was not operating at the time of the inspection. Kenneth said he goes outside to check the stacks frequently during every cremation – primarily during the beginning of cremations – and he has not observed any visible emissions. Based on this information, an emissions test to verify compliance with the emission limit in SC I.1 has not been requested by the AQD.

Material Limits

The cremation unit is permitted to burn human pathological waste and associated materials (SC II.1). Kenneth stated that only humans are burned. The cremation records I reviewed showed that only human pathological waste is burned.

The cremation unit has a material limit of 1,000 lbs per charge, where charge is the total weight of the material placed in the incinerator to be combusted (SC II.2). I reviewed the cremation records and did not see any weight exceedances. Kenneth said the largest charge he has ever burned was around 600 lbs.

The facility is required to use natural gas as fuel in the cremation unit (SC II.3). Kenneth stated that only natural gas is used, and I did not see any evidence of other types of fuel being used in the cremation units.

Process/Operational Restrictions

Alta is restricted from combusting waste in the cremation unit unless a minimum temperature of 1600°F and a minimum retention time of 1.0 second in the secondary combustion chamber are maintained (SC III.1). As stated above, the cremation unit was not operating at the time of the inspection. I observed the control panel on the incinerator and the circle temperature charts and noted that the secondary combustion chamber has a set point temperature of 1650°F. Based on the circle temperature charts, the secondary combustion chamber temperature did not drop below 1600°F while combusting waste.

Design/Equipment Parameters

The facility is required to install, maintain, and operate the secondary combustion chamber in a satisfactory manner (SC IV.1). Based on the inspection and records reviewed, the secondary combustion chamber is being operated in a satisfactory manner.

As required by SC IV.2, EUCREMATORY1 is equipped with a device to continuously monitor the temperature in the secondary combustion chamber. I observed the chart recorder above the control panel on the cremation unit.

The facility is required to maintain a scale to verify charge weight (SC IV.3). I observed the scale attached to their lift table that is used to verify charge weight.

Monitoring/Recordkeeping

The facility must keep continuous secondary combustion chamber temperature data (SC VI.2 & SC VI.5). I observed that continuous secondary combustion temperature records are maintained on circular charts.

The facility must keep daily records of the time (duration of burn), description and weight of each charge combusted in EUCREMATORY1 (SC VI.3). I verified that the start/stop time and date is noted on the circle temperature charts. The charge weight is recorded in the cremation logs.

The facility must record, on a calendar quarter basis, periods of time when only pathological waste is burned (SC VI.4). According to Kenneth and the cremation records I reviewed; only human pathological waste is burned at this facility.

The facility must keep a record of all service, maintenance, and equipment inspections for EUCREMATORY1. Kenneth stated that the manufacturer, B&L Cremation Systems, said that the machine does not need maintenance inspections until it reaches 1,500 runs. Since Alta does not frequently operate, Kenneth stated they have only completed around 600 cremations. I verified that extra thermocouples are kept on-site.

Appendix A

Each cremation unit is required to be installed, maintained, and operated in a manner satisfactory to the AQD to control emissions (SC III.2). I reviewed the list of recommended procedures in Appendix A with Kenneth.

1. Kenneth is Alta's trained operator and is responsible for compliance with the air pollution control requirements.
2. Grates are cleaned after each burn and cremains are returned to the family.
3. Kenneth stated that they do not combust waste until the secondary combustion chamber is above 1600°F. The records I reviewed verify this statement.
4. Kenneth stated that they do not overload the incinerators. A scale is used to verify and record charge weight. The records I reviewed verify this statement.
5. Kenneth said that since business has been slow recently, they have not burned more than one charge in a day. Kenneth said he opens the primary chamber door to redistribute the charge towards the end of the cremation and to ensure the charge is completely burned.
6. Only human pathological waste and associated materials are burned in the incinerators. The records I reviewed verify this statement.
7. Kenneth verified that combustion air is adjusted as needed, according to the manufacturer's instructions.
8. Stacks are viewed during every cremation. Kenneth said he never observes visible emissions during cremations.
9. A copy of the manufacturer's manual is located near the incinerator.
10. B&L Cremation Systems told Kenneth that regular maintenance is not required until 1,500 runs. The incinerator has only had around 600 runs. Kenneth stated that he ensures the incinerator is operating properly during every cremation and he contacts Matthews if he has any questions regarding the unit.
11. Kenneth stated that he follows the manufacturer's instructions and maintenance guidelines.

Additional Observations

Charge Storage

Alta has a walk-in refrigeration unit to store charges prior to cremation. The refrigeration unit can store up to six charges. During the inspection, Kenneth showed me that the refrigeration unit was shut off because they have not had the need to store any charges.

Secondary Processing

I viewed the secondary processing area with Kenneth during the inspection. After each cremation, the cremains are transferred to the secondary processing to remove materials such as implants and grind the cremains into ash. The grinder vents to the general in-plant environment.

Conclusion

Based on this inspection and record review, the following violation notice will be resolved: PTI No. 115-20, EUCREMATORY, SC III.2 & SC IV.1 issued on July 11, 2023. Alta Cremation and Services Inc. is in compliance all the applicable requirements evaluated.

NAME Mark Ral DATE 06/25/2024 SUPERVISOR K. Kelly