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

P058872969

FACILITY: 222394536 Delaware, LLC dba Trusted Journey	**SRN / ID:** P0588
LOCATION: 3779 S ORTONVILLE ROAD, CLARKSTON	**DISTRICT:** Warren
CITY: CLARKSTON	**COUNTY:** OAKLAND
CONTACT: John Cream , Operations Manager	**ACTIVITY DATE:** 07/17/2024
STAFF: Marie Reid **COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: FY24 inspection	
RESOLVED COMPLAINTS:	

On, July 17, 2024, I (Marie Reid), Michigan Department of Environment of Great Lakes, and Energy – Air Quality Division (EGLE – AQD), conducted a scheduled inspection of, 222394536 Delaware, LLC dba Trusted Journey (Trusted Journey) (SRN: P0588) located at 3779 S Ortonville Road, Clarkston, 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; (PTI) Nos. 20-15, 199-15, 6620, 42-22, and 47-24.

I arrived at the facility at 9:30 am and met with John Cream, Operations Manager. I identified myself and stated the purpose of the inspection. John and I discussed the facility's operations, toured the facility, and John provided records. I reviewed the provided records at the facility during the inspection. Each cremation unit was operating at the time of the inspection.

Facility Description
Trusted Journey is an animal crematory which offers private and communal cremations. The facility currently operates five crematory furnaces. This facility operates 8 am to 3:30 pm Monday – Friday. If desired, this facility also provides an engraved box for the cremains and a clay paw-print of your pet's paw. This facility is a true minor of particulate matter (PM).

On March 15, 2015, and November 19, 2015, PTI Nos. 20-15 and 199-15 were issued to operate two nearly identical Matthews Cremation Division cremation units (EUCREMATORY1 and EUCREMATORY2). On July 1, 2020, PTI No. 66-20 was issued to operate a Matthews Cremation Division cremation unit (EUCREMATORY3). On April 12, 2022, PTI No. 42-22 was issued to operate a B&L Cremation Systems Three Chamber cremation unit (EUCREMATORY4). On April 24, 2024, PTI No. 47-24 was issued to operate a Therm Tec G30 cremation unit (EUCREMATORY5).

Compliance Evaluation
During this inspection, I evaluated compliance with PTI Nos. 20-15, 199-15, 66-20, and 42-22. At the time of my inspection, EUCREMATORY5 was not delivered or installed at the facility, so I did not evaluate compliance with PTI No. 47-24.

Emission Limits
All four cremation units have a PM emission limit of 0.20 lbs / 1,000 lbs of gas calculated to 50% excess air. The cremation units should meet this emission limit based on proper operation of the secondary combustion chamber. An emissions test to verify compliance with this emission limit has not been requested by the AQD.

Material Limits
Each cremation unit is permitted to burn animal pathological waste and associated materials. John stated that only animal pathological wastes and associated materials are burned. Cremation records I reviewed confirmed that only animal pathological waste is burned.

Each cremation unit has a maximum charge weight, where charge is the total weight of the material placed in the incinerator to be combusted. EUCREMATORY1 and EUCREMATORY2 both have a maximum charge of 400 pounds, EUCREMATORY3 has a maximum charge is 300 pounds, and EUCREMATORY4 has a maximum charge of 500 pounds. I reviewed the cremation records and did not see any weight exceedances. John stated that EUCREMATORY1, EUCREMATORY2 and EUCREMATORY3 are used for larger charges and communal cremations. He stated that since the three primary combustion chambers in EUCREMATORY4 are smaller, they are used for private cremations. All of the cremation units were operating during my inspection. All cremation units were combusting waste below their maximum permitted weights. Below are the charge weights I noted during the inspection.

EUCREMATORY1 – 119lbs
EUCREMATORY2 – 150lbs
EUCREMATORY3 – 94lbs
EUCREMATORY4 (unit #4) – 6.6lbs
EUCREMATORY4 (unit #5) – 12.6lbs
EUCREMATORY4 (unit #6) – 12.8lbs

The facility is required to use natural gas as fuel in each cremation unit. John stated that only natural gas is used, and I did not see any evidence of other types of fuel being used.

Process/Operational Limits
The facility cannot combust waste in any of the cremation units unless a minimum temperature of 1600°F and a minimum retention time of 1 second in the secondary combustion chamber are maintained. I reviewed some of the circular temperature charts during the inspection and did not see any instances of the temperature dropping below 1600°F while combusting waste. Each cremation unit was operating above the minimum required temperature of 1600°F. I observed the control panel on each cremation unit and noted the following secondary combustion chamber temperatures:

EUCREMATORY1 - 1703°F
EUCREMATORY2 - 1762°F
EUCREMATORY3 - 1723°F
EUCREMATORY4 - 1648°F

I observed an operator open EUCREMATORY3's primary chamber door about halfway and rake the cremains. John explained that operators rake the cremains throughout the cremation, so the cremains are directly under the flame. I watched the live footage of the stacks on the TV in the cremation room. I did not observe visible emissions from the stack when the operator raked the cremains.

Each cremation unit is required to be installed, maintained, and operated in a manner satisfactory to the AQD to control emissions. Compliance with this condition is

demonstrated through proper operation of the secondary combustion chamber and through following the recommended procedures in Appendix A. I reviewed the list of recommended procedures in Appendix A with John.

Appendix A

1. John stated that there are two trained operators at the facility.
2. Grates are cleaned before each cremation.
3. John stated that waste is combusted in the cremation units once the secondary combustion chamber (afterburner) temperature is above 1600°F.
4. John stated that they do not overload any of the cremation units. A scale is used to verify charge weight. The records I reviewed verify this statement.
5. John stated that the charge doors are opened as infrequently as possible.
6. John stated that only animal pathological wastes are burned at the facility. The records I reviewed, and site tour verify this statement.
7. John stated that the combustion air is adjusted as needed.
8. There are cameras pointing at the stacks on the roof of the facility and the live feed is displayed on a TV in the cremation room. John can also watch the live video feed on his phone when he is not at the facility.
9. Manufacturer manuals are in the office near the incinerator.
0. The operators conduct monthly inspections and necessary maintenance on all units. John stated that they always make sure to have thermocouples, belimos, spark plugs, and other spare parts on hand in case of an equipment failure during an operation. John noted that it is important not to operate the incinerators too hot, because he noticed that increases the frequency of thermocouple failures.
1. John stated that they follow the manufacturers' operation and maintenance guidelines for the cremation units.

Design/Equipment Parameters

The permittee cannot operate EUCREMATORY3 or EUCREMATORY4 unless the secondary combustion chamber with afterburner is installed, maintained, and operated in a satisfactory manner. Based on the inspection and review of the temperature records, the secondary combustion chambers with afterburners have been operated properly.

Each cremation unit is required to be equipped with a device to monitor and record the temperature in the secondary combustion chamber on a continuous basis. I observed that every cremation unit is equipped with a circular temperature chart to monitor the secondary combustion chamber temperature.

During the previous inspection, conducted on August 2, 2023, the circle temperature chart on EUCREMATORY3 was inoperable and a violation notice of EUCREMATORY3, III.1, III.2, IV.1, IV.2, VI.2, & VI.5 was issued on August 30, 2023. During this inspection I confirmed that this circle temperature chart was operational, and this violation notice will be resolved.

The facility is required to maintain a scale for verifying the charge weight. I observed the scale that is used to weight charges.

Testing/Sampling

PTI No. 42-22 requires the permittee to verify PM emission rates from EUCREMATORY4 if requested by the AQD district supervisor. AQD is not requesting stack testing at this time.

Monitoring/Recordkeeping
The facility must keep continuous secondary combustion chamber temperature data. I verified that continuous secondary combustion temperature records are maintained on circular charts for every cremation. Each cremation unit has a folder containing its circle temperature charts.

The facility must keep daily records of the time (duration of burn), description and weight of each charge combusted in each cremation unit. The facility keeps separate cremation logs for private and communal cremations. I verified that the cremation logs contain the start/stop time, weight, and description of each charge combusted.

During the previous inspection, conducted on August 2, 2023, I noted that the start/stop time was not recorded on the cremation logs and was instead recorded separately in their own online system. I recommend that Trusted Journey record the start/stop time in the cremation logs to make record review quicker for the facility and AQD staff. During this inspection, I observed that the facility began recording start/stop time in their cremation logs.

During the previous inspection, conducted on August 2, 2023, the charge weight for communal cremations was recorded for all of the units combined instead of recording the charge weight for each unit individually. A notice of violation of EUCREMATORY1, EUCREMATORY2, & EUCREMAORY3 SC VI.3 was issued on August 20, 2023. I confirmed during this inspection that communal cremation charge weights were properly recorded for each cremation unit. Based on the results of this inspection, this violation will be resolved.

The facility must record, on a calendar quarter basis, periods of time when only pathological waste is burned. According to John and the cremation records I reviewed; only animal pathological waste is burned at this facility.

The facility must keep records of all service, maintenance, and equipment inspections. The operators conduct monthly inspections on all of the cremation units. These records contain an inspection checklist and section to note any maintenance done on the units. I reviewed some of these records at the facility during the inspection. I noted that the most recent inspection on the cremation units was conducted on June 3, 2024. In the inspection record for EUCREMATORY1, it was noted that a thermocouple was replaced.

Additional Observations
Charge Storage
I observed a walk-in refrigeration unit where charges are stored prior to cremation. Private and communal charges are stored in separate areas in the refrigeration unit. I observed around 35 charges in the refrigeration unit. I also observed a deep freezer that John said is used when they need additional storage. I did not look inside the deep freezer.

Secondary Processing
I viewed the secondary processing area with John during the inspection. After cremations, the cremains are transferred to a secondary processing station where they are cooled, screened for metals, ground to a dust in a grinder, and packaged. The grinder vents to the general in-plant environment. I observed multiple trays of cremains cooling in the secondary processing area.

Kiln
In the south side of the facility, I observed a kiln that is used to fire clay with an imprint of the pet's paw to make ceramic pieces. The kiln was not operating during the inspection. I noted that the nameplate identified this operating unit as a Evenheat Ceramic Kiln, with a model number of PF 1822D and a serial number of 72,111. John stated the kiln is only used for firing ceramic ware. Based on this information, this kiln is exempt from the requirement to be permitted as stated in Rule 201 pursuant to Rule 282(2)(a)(iii).

Laser Engraving
In the south side of the facility, I observed a laser engraver used to engrave urns. The laser engraver was engraving a wooden urn during the inspection. I noted that the nameplate identified this operating unit as a Laser Engraving Cutting Machine with a model number of 1S1420 and a serial number of 37386. The operating unit is equipped with a Micro Multi-Stage Fume Extraction device with a pre-filter, a HEPA filter with an efficiency of 99.999% at 0.3 micrometers, and a gas filter. Based on this information, this laser engraving machine is exempt from the requirement to be permitted as stated in Rule 201 pursuant to Rule 285 (2)(l)(vi)(C).

EUCREMATORY5 Future Location
John stated that EUCREMATORY5 will be installed in a building adjacent to the facility that was previously used for storage. John stated that when they install the unit, they will also install a camera on the roof facing the stack so the operators can watch the live feed during cremations. I observed this building and confirmed that EUCREMATORY5 has not yet been delivered to the facility.

Conclusion
Based on this inspection and record review, the following violation notices will be resolved: PTI No. 20-15, EUCREMATORY1 SC VI.3, PTI No. 199-15, EUCREMATORY2 SC VI.3, and PTI No. 66-20, EUCREMATORY3 SC VI.3, SC III.1, SC III.2, SC IV.1, SC IV.2, SC VI.2, and SC VI.5 issued on August 30, 2023. 222394536 Delaware, LLC dba Trusted Journey is in compliance all the applicable requirements evaluated.

NAME _____ DATE 8/9/2024 SUPERVISOR _____