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

P113359580

FACILITY: TLC Crematory Company		SRN / ID: P1133
LOCATION: 4153 Chicago Drive, GRANDVILLE		DISTRICT: Grand Rapids
CITY: GRANDVILLE		COUNTY: KENT
CONTACT: John Kuiper , Funeral Director		ACTIVITY DATE: 08/11/2021
STAFF: Michael Cox	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS:
SUBJECT: Scheduled Unanno	ounced Inspection	
RESOLVED COMPLAINTS:		

On Wednesday August 11, 2021, AQD Staff Michael Cox conducted an unannounced scheduled inspection of TLC Crematory Company located at 4153 Chicago Drive, Grandville, MI 49418. The purpose of this inspection was to verify compliance with Permit to Install No. 77-20 and all other applicable air quality rules and regulations. Michael Cox arrived on site at approximately 1:30 pm and contacted Mr. John Kuiper III, Funeral Director, to conduct the inspection. No visible emissions or odors were noted upon arrival.

Facility Description:

TLC Crematory Company is a human remains crematorium permitted to operate a Matthews Environmental Solutions IE43-PPII Plus human remains incinerator (EUCREMATORY1). The incinerator is natural gas fired with a maximum charge of 750 pounds (lbs). The maximum burn rate for the incinerator is 175 pounds per hour (lbs/hr). TLC Crematory Company is currently operating under PTI No. 77-20, which was issued on September 17, 2020. The facility is categorized as a Minor source due to their potential to emit of Particulate Matter (PM).

Compliance Evaluation:

After arriving on site, Michael Cox (MTC) contacted Mr. John Kuiper III, Funeral Director for the facility, and presented a State of Michigan identification card and informed them of the intent of the inspection. We met in an office, where the terms and conditions of PTI No. 77-20 were discussed and the required records were reviewed. Ms. Lisa Matthysse emailed the records to MTC for the time period of December 2020 through August 11, 2021, due to the facility not starting operation of the crematorium until December 2020. After reviewing PTI No. 77-20 and on-site chart recorder data with Mr. Kuiper, we began the facility tour. Throughout the facility tour, MTC was able to observe the emission unit outlined in the permit: EUCREMATORY1. There appeared to be no observable changes to the incinerator or associated stack. Below are the results of the inspection.

EUCREMATORY1:

This facility operates a Matthews Environmental Solutions IE43-PPII Plus human remains incinerator (EUCREMATORY1). The incinerator is natural gas fired with a maximum charge of 750 pounds (lbs). The maximum burn rate for the incinerator is 175 pounds per hour (lbs/hr).

Emission Limits:

TLC Cremation Company is subject to the following emission limit:

PM - 0.20 lb/1000 lbs of gas

During the site tour no visible emissions were noted coming from the stack. EUCREMATROY1 appeared to be kept in good operating condition. Based on observations made during the site visit, it appears that TLC Crematory Company is in compliance with the above referenced PM limitation.

Material Limits:

TLC Cremation Company is subject to the following material limits:

- Only burning of pathological waste is permitted. As defined in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.51c, pathological waste means waste materials consisting of only human or animal remains, anatomical parts, and/or tissue; the bags/containers used to collect and transport the waste material; and animal bedding. This emission unit shall burn only human pathological waste and associated materials.
- The permittee shall not charge more than 750 pounds per charge in EUCREMATORY1, where charge is the total weight of the material placed in the incinerator to be combusted.
- The permittee shall not burn any fuel in EUCREMATORY1 other than Natural Gas.

Based on the review of the facility's records for the time period of December 2020 through August 11, 2021, the crematorium is only burning pathological waste. The highest charge could not be determined from the records provided; therefore, it is unknow whether the facility exceeded that maximum charge rate. Discussions with Mr. Kuiper revealed that the incinerator cannot exceed its maximum charge rate due to the design capacity of EUCREMATORY1. The facility's records and on-site observations determined that the facility is only utilizing natural gas as a fuel for the incinerator.

Process/Operational Restrictions:

TLC Crematory Company is required to combust waste in EUCREMATORY1 with a minimum temperature of 1600°F and a minimum retention time of 1.0 second in the secondary combustion chamber are maintained. From the records provided by the facility it appears that the incinerator is maintaining the correct minimum temperature for the time period of December 2020 through August 11, 2021. TLC Crematory Company staff stated that EUCREMATORY1 has an interlocking system that prevents the operator from loading a charge prior to the incinerator achieving the proper temperature in the combustion chamber. TLC Crematory Company is also required to maintain and operate the incinerator in a satisfactory manner. Based on observations made during the inspection the incinerator appears to be kept in good working condition. In an email dated August 12, 2021, facility staff stated that because the incinerator is new, maintenance hasn't been conducted. MTC advised staff to keep records of maintenance and cleanings for future inspections.

Monitoring/Recordkeeping:

TLC Crematory Company is required to keep records of the secondary combustion chamber on a continuous basis. These records were provided to MTC and were reviewed. Based on the review of the secondary combustion chamber temperature records, TLC Crematory Company is sufficiently keeping track of the secondary combustion chamber. No issues were noted where the temperature was below the minimum 1600 ° F, however on-site chart recorded temperature records were noted as not having the correct times and dates. MTC advised the facility to use one chart on the recording device for one day and record the day as well as match up the times on the recording device with the chart to accurately show burn times instead of handwriting days and times on the charts. The facility is required to keep daily records of the time (duration of burn), description and weight of the charge combusted in EUCREMATORY1. Based on the review of the records, the facility is not accurately keeping track of the weight of the charge combusted. MTC discussed this issue with facility staff. TLC Crematory Company staff stated that the operator weighs the charge and is entered into a weight category on the incinerator. MTC advised staff to keep exact records of the charge weight. The facility is also required to keep records on a calendar quarter basis of the periods of time when only pathological waste is burned in the incinerator. Based on a review of the records

provided, TLC Crematory is keeping records of pathological waste burned on a quarterly basis as required. Finally, records of any opacity alarms displayed by **EUCREMATORY1**, the date, times, reason for those alarms, and any corrective actions taken to prevent similar situations from occurring in the future are also required of the facility. Alarm records were provided and reviewed for the time period of December 2020 through August 11, 2021. TLC Crematory is keeping track of the opacity alarm codes as required. No issues were noted.

Compliance Determination:

Based on the information provided and the on-site evaluation, TLC Crematory Company appears to be out of compliance with PTI No. 77-20 recordkeeping requirements. Specifically, Special Condition VI. 3 as required by Special Condition II. 2.

NAME Michael T. Cox DATE 8/31/2021 SUPERVISOR HH