

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

P031458516

<b>FACILITY:</b> Lake Michigan Crematory Inc.		<b>SRN / ID:</b> P0314
<b>LOCATION:</b> 166 Fifth Ave, HOLLAND		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> HOLLAND		<b>COUNTY:</b> OTTAWA
<b>CONTACT:</b> Steven Palmateer , Owner		<b>ACTIVITY DATE:</b> 06/17/2021
<b>STAFF:</b> Chris Robinson	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> FY'21 inspection to determine the facility's compliance status with respect to PTI no. 12-12E and any other applicable air quality rules and regulations.		
<b>RESOLVED COMPLAINTS:</b>		

The purpose of this report is to document the findings of an onsite inspection of Lake Michigan Crematory, Inc. (SRN P0314) located at 166 5<sup>th</sup> Avenue in Holland, Michigan. The inspection was conducted by AQD staff Chris Robinson (CR) on June 17, 2021 to determine the facility's compliance status with the requirements of the federal Clean Air Act; Part 55 (Michigan's Air Pollution Control Rules) of Act 451 (Natural Resources and Environmental Protection Act (NREPA)); and the requirements established in Permit to Install (PTI) No. 12-12E.

Due to the Covid19 pandemic and to ensure proper staff were onsite CR contacted Steven Palmateer, owner, on June 14, 2021 and scheduled the inspection for June 17, 2021. Proper PPE and social distancing were maintained by AQD staff throughout the entire inspection. No odors or visible emissions were observed.

The weather conditions during the inspection were approximately 66°F, fair with southerly winds at approximately 7 mph ([www.weatherunderground.com](http://www.weatherunderground.com)).

### **A) Facility Description**

Lake Michigan Crematory is a human remains crematorium with the site being permitted to operate three (3) incinerators (EUCREMATORY1, EUCREMATORY2 & EUCREMATORY3) under PTI No. 12-12E.

### **Compliance Evaluation**

#### **PTI No. 12-12E**

Units 1 and 2 are manufactured by Matthews and were installed in 2014 and 2013, respectively. EUCREMATORY3 was added to the permit during the most recent PTI modification which was issued on March 17, 2021. This unit has not yet been installed. The facility has 18 months from the time the PTI was issued to commence installation which would be September 2022. Per Mr. Palmateer unit 3 should be installed yet this year. EUCREMATORY3 will not be discussed further.

Since they are identical, units 1-2 are required to be labeled per FGCREMATORY (EUCREMATORY 1 & 2) Special Condition (SC) IX.1 of the PTI, which they are.

Each unit is subject to a particulate matter (PM) emission limit of 0.2 pounds per 1,000 pounds of exhaust gas (SC I.1). Compliance with this limit is demonstrated by properly operating and maintaining the units as required by SC III.2 and detailed in Appendix A. Appendix A, which is posted near the units was discussed with Mr. Palmateer and the facility appears to be following those requirements. A list of maintenance is being maintained as required by SC VI.6.

In addition, each unit is subject to material limits limiting waste to only pathological waste (SC II.1), limiting charge weight, as specified in SC II.2, to 750 lbs. each for EUCREMATORY1 and EUCREMATORY2. Lastly, the fuel used to operate the units shall be only natural gas (SC II.3). Per discussions with Mr. Palmateer only pathological waste is used and the units are only designed to burn natural gas. Compliance with the charge weight is demonstrated by maintaining those records as required by SC VI.3 along with durations and description of the charge. CR reviewed all records onsite. To ensure charge weight is not exceeded the facility maintains a scale onsite as required by SC IV.3.


Proper operation also requires that a secondary chamber (afterburner) be installed and properly operated and maintained. This requires the afterburner to be at a certain temperature prior to combustion in the main chamber. For EUCREMATORY1 and EUCREMATORY2 the afterburner temperature must be maintained at a temperature of 1,450°F (SC III.1). Afterburners have been installed and appear to be maintained and operated properly per SC IV.1. Temperatures in both the main and secondary chambers of both units is being monitored and recorded as required by SC IV.2. The temperature data is monitor and recorded electronically and on circle charts. Both units were in a cooldown mode so the afterburner temperature could only be observed through records, which indicated that the afterburner temps were being maintained above 1,450°F. Since these are new units, programming prevents the operator from initiating combustion in the main chamber prior to the afterburner reaching 1,450°F. The system is monitored remotely by Matthews to ensure proper operation. If an issue is observed or suspected Matthew's notifies the facility who then makes any necessary repairs or changes. Temperature records were available as required by SC VI.5 and reviewed onsite.

Special Condition VI.4 requires the facility to keep quarterly records of the time when only pathological waste was burned as required by 40 CFR 60.50c(b). Since the facility is only permitted by the State of Michigan to burn pathological waste this record keeping requirement is be demonstrated by complying with the record keeping requirement for SC VI.3 of the PTI, with the only difference being that the PTI requirement is daily not quarterly. Complying with the states more stringent daily requirement satisfies the federal quarterly requirement.

Stack Heights and diameters are specified in SC VIII.1 of the PTI. Both units have the same requirements, which is a maximum diameter of 20-inches and a minimum height of 27-feet. These measurements were not verified but visually they seemed correct.

### **B) Compliance Determination**

Based on a records review and observations taken at the time of the inspection, Lake Michigan Crematory Inc. appears to be in compliance with applicable air quality rules and regulations including the requirements established in PTI 12-12E.

NAME 

DATE 6/18/2021

SUPERVISOR 