

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

P031463560

FACILITY: Lake Michigan Crematory Inc.		SRN / ID: P0314
LOCATION: 166 Fifth Ave, HOLLAND		DISTRICT: Grand Rapids
CITY: HOLLAND		COUNTY: OTTAWA
CONTACT: Steven Palmateer , Owner		ACTIVITY DATE: 07/11/2022
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY'22 inspection to determine the facility's compliance status with respect to PTI no. 12-12E and any other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

I – Introduction

Chris Robinson (CR) from the Department of Environment, Great Lakes, and Energy's (EGLE) Air Quality Division (AQD) was on site to conduct inspections of Lake Michigan Crematory, Inc. (SRN P0314) on July 11, 2022. The facility is located at 166 5th Avenue in Ottawa County, Holland, Michigan. Prior to entry CR surveyed the perimeter of the facility for odors and visible emissions. None were observed. Weather conditions were mostly cloudy with a temperature of approximately 75°F and south-southwest winds at 13 mph (www.weatherunderground.com).

CR met with the owner, Steve Palmateer. Steve had contacted CR during the week of July 4, 2022, to inform him that unit 3 was installed and operating and to request his presence to go through the Permit to ensure no issues.

II - Facility Description

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

III - Compliance Evaluation

1) PTI No. 12-12E

A) EUCREMATORY3 & FGCREMATORY

Emission units EUCREMATORY1, EUCREMATORY2, and EUCREMATORY3 were manufactured by Matthews and installed in 2014, 2013 and 2021, respectively. EUCREMATORY3 was added to the permit during the most recent PTI modification which was issued on March 17, 2021. Units one (1) and two (2) are covered under PTI Flex Group FGCREMATORY while Unit three (3) is covered under EUCREMATORY3. Since units 1 and 2 are identical they are required to be labeled per FGCREMATORY 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 (SC III.2). A list of maintenance conducted 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), a charge weight (SC II.2), and a requirement to only use natural gas (SC II.3). Charge weights are

based on manufacturer recommendations. Units 1 and 2 are limited to 750 pounds each and unit 3 is limited to 1,200 pounds. 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 (SC III.1). For EUCREMATORY1 and EUCREMATORY2 the afterburner temperature must be maintained at a temperature of 1,450°F and at 1,600°F for EUCREMATORY3. 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 are being monitored and recorded as required by SC IV.2. The temperature data is monitored and recorded electronically and on circle charts. None of the units were operating at the time of this inspection. However, units 1 and 2 were operating in a cool down mode during the previous inspection which was observed. Records indicate that afterburner temperatures are being maintained as required. Since these are newer units, programming prevents the operator from initiating combustion in the main chamber prior to the afterburner reaching temperature. Mathews remotely monitors the system to ensure proper operation. If an issue is observed or suspected Mathews notifies the facility who then makes any necessary repairs or changes. Temperature records were available as required by SC VI.5.

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 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 state's more stringent daily requirement satisfies the federal quarterly requirement.

Stack Heights and diameters are specified in Special Condition (SC) VIII.1 of EUCREMATORY3 and EUCREMATORY. These measurements were not verified but visually seemed correct.

IV - 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 7/15/2022

SUPERVISOR _____

