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

N833965509

FACILITY: Great Lakes Cremation, Inc.		SRN / ID: N8339
LOCATION: 29547 Costello Dr, NEW HUDSON		DISTRICT: Warren
CITY: NEW HUDSON		COUNTY: OAKLAND
CONTACT: Gil Pietrandrea , Facility Manager		ACTIVITY DATE: 11/22/2022
STAFF: Robert Elmouchi	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site Inspection and complaint investigation.		
RESOLVED COMPLAINTS: C-23-00441		

Great Lakes Cremation (GLC) is located at 29547 Costello Drive, New Hudson, Michigan. This Facility has been assigned the State Registration Number (SRN) of N8339. On November 21, 2022, I conducted an off-site inspection of GLC. On November 22, 2022, I conducted an on-site inspection of GLC. The purpose of these inspections 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 451P); the administrative rules; Permit to Install (PTI) No. 232-09B and No. 61-15; and to investigate a recent complaint which the AQD received on November 21, 2022, regarding smoke, foul odors, and fallout attributed to GLC's operations.

COMPLAINT INVESTIGATION

On Monday, November 21, 2022, at 8:43 a.m., the AQD received a complaint via telephone. The complainant stated that they were experiencing foul odor and were being fumigated by smoke emissions from Great Lakes Cremation.

I immediately telephoned Gil Pietrandrea, Great Lakes Cremation Facility Manager, and discussed the complaint. Gil stated that he had not yet arrived at Great Lakes and was not aware of a malfunction. We agreed that I should call Danielle Hall, Great Lakes Cremation Supervisor, to determine if there was a malfunction. Gil mentioned that the Closed-Circuit Television (CCTV) monitor was not working, and it was scheduled to be repaired that day.

I immediately telephoned Danielle Hall to discuss the complaint. She mentioned that the CCTV monitor was not working so she could not monitor the exhaust stacks from the inside of the building. We agreed that Danielle would investigate the matter and contact me later to provide details.

At 9:29 a.m. I received a follow-up telephone call from Gil Pietrandrea. I was informed that the malfunction occurred with EUCREMATORY1. Gil stated that the Throat Air was incorrectly set to, "on." He said that the Throat Air must be in the off position for the first cremation of each day, otherwise the secondary combustion chamber will not be able to maintain the permit required minimum temperature of

1600 degrees Fahrenheit. Gil also stated that the smoke lasted about 10 minutes. Improperly setting the cremation unit controls in a manner that adversely affects the ability of the air-cleaning device to control emissions constitutes a violation of PTI No. 232-09B, EUCREMATORY1 III.2, and R 336.1910 of the Michigan Air Pollution Control rules. This failure to operate the air-cleaning device in a satisfactory manner shall be cited in a violation notice.

Gil also stated that while driving to Great Lakes Cremation, he paid close attention to the wind direction. Gill stated that he observed the wind was blowing directly to the north and that the complainant could not have been affected by emissions from Great Lakes Cremation. I noted that Gil arrived after the event and that I have observed wind directions vary dramatically in that area. After the telephone conversation, I checked the wunderground.com weather history for New Hudson, Michigan. The weather history for November 21, 2022, showed the wind speed was 15 miles per hour and the wind direction changed from SSW to SW between 7:53 and 8:53 a.m. Therefore, it is plausible that varying wind directions did blow the smoke plume in the direction of the complainant.

ON-SITE INSPECTION

On Tuesday, November 22, 2022, I conducted an on-site inspection.

Before entering the facility, I conducted visible emission observations from the east side of the parking lot and north of the GLC address. I observed hot exhaust from GLC's cremation units causing optical distortion of the trees in the background. Optical distortion is not opacity. I observed zero percent visible emissions during the observation period.

I entered the facility and met with Danielle Hall, Supervisor. Gil Pietrandrea, Facility Manager, arrived shortly after the start of the inspection. We reviewed my November 21, 2022, revision of GLC's Malfunction Abatement Plan. We started by reviewing the newly added Appendix MAP-A and Appendix MAP-B in detail. Both Gil and Danielle appeared to appreciate the compliance guidelines examples in Appendix MAP-A, and the explanations on how Parts 3 and 9 apply to the cremation industry in Appendix MAP-B. Per this experience, it appears that Appendix MAP-A and Appendix MAP-B may be used to educate crematory owners about air-cleaning device compliant operation.

Gill and Danielle accepted my offer to review the revised MAP with GLC's employees. Danielle brought the two cremation unit operators to the front office, and we reviewed the MAP with emphasis on detecting, correcting, and reporting a malfunction. The training also included a review of the Part 3 and Part 9 Michigan Air Pollution Control rules that apply to cremation, with an emphasis on opacity

exceedances and satisfactory operation of the air-cleaning device. Gil and Danielle also emphasized the importance of operating the air-cleaning device in a satisfactory manner, at all times.

Malfunction Report

We discussed the cause of the complaint received on November 21, 2022. Danielle Hall presented a Malfunction Report for the EUCREMATORY1 November 21 malfunction. The report stated that the cremation started about 8:30 a.m. and dark emissions continued approximately 10-15 minutes. The report stated the cause was operator error, "The operator neglected to initiate the cremation process by pressing the load/cremate button after loading a charge into the unit."

It is important to note it appears that Gil and Danielle reported different causes for this malfunction. Furthermore, I received a follow-up call from Danielle on Wednesday, November 23 in which she reported that the EUCREMATORY1 malfunction had not been resolved. Danielle stated that GLC will discontinue operating EUCREMATORY1 until it is serviced by a qualified technician. I will follow-up with GLC to confirm the cause and correction of this malfunction are documented.

Danielle Hall asked me to review the Malfunction Report to make sure GLC was reporting all relevant information. I stated that I would review the malfunction report and provide a report template. My malfunction report template is pending. Also, per Danielle's dictation during this inspection, I wrote-up a Cremation Unit Operating Procedure, and emailed the procedure to Gil and Danielle later that day.

EMISSION UNITS

The face of each cremation unit has soot deposits. Soot deposits do not indicate a malfunction. I looked at the control panels and temperature chart recorders. The real-time value on the paper temperature chart appeared to correlate with the control panel digital display on each cremation unit.

I observed that the CCTV monitor was working. The installer was present, and we discussed adjusting camera views for effective monitoring.

RECORDKEEPING

Per previous discussions, GLC now replaces the circular temperature chart paper daily, except for weekends when fewer cremations occur. I reviewed temperature chart records from November 21, 2022. I observed that the EUCREMATORY4 circular

paper temperature chart for November 21, 2022, contained illegible hand-written text. This is a violation of PTI No. 232-09B, Special Condition VI.2, which states in part, "The permittee shall keep, in a satisfactory manner, daily records of the time (duration of burn), description and weight of waste combusted in EUCREMATORY1, as required by SC II.1 and SC II.2."

It's important to note that satisfactory record keeping must be clearly legible so the data can be used to review performance and correct malfunctions.

MAP Procedures Review

NAME Robert Ilmarchi

Due to time limitations, Gil, Danielle, and I agreed to table review of the revised MAP procedures until I return in a few weeks.

CONCLUSION

Great Lakes Cremation shall be cited for violations of PTI No. 232-09B, EUCREMATORY1 III.2, R 336.1910, and EUCREMATORY4 VI.2.

This report also resolves complaint no. C-23-00441.