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

P093265951

FACILITY: Southern Michigan Cremation Services R.O. Inc.		SRN / ID: P0932
LOCATION: 4839 Fernlee Avenue, ROYAL OAK		DISTRICT: Warren
CITY: ROYAL OAK		COUNTY: OAKLAND
CONTACT: Tom Perini , Operations Manager		<b>ACTIVITY DATE:</b> 12/15/2022
STAFF: Robert Elmouchi	<b>COMPLIANCE STATUS:</b> Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Self-initiated inspection.		
RESOLVED COMPLAINTS:		

On December 15, 2022, I conducted an unannounced scheduled inspection of Southern Michigan Cremation Services R.O. Inc., located at 4839 Fernlee, Royal Oak, Michigan. This facility is uniquely identified by the Air Quality Division with the State Registration Number (SRN) of P0932. 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); the administrative rules; and air use permit to install (PTI) number 113-18A.

Southern Michigan Cremation Services R.O. Inc. cremates only human remains. This facility has four permitted cremation units: EU-CREMATORY3, EU-CREMATORY4, EU-CREMATORY5, and EU-CREMATORY6.

I entered the facility, introduced myself, and met with Tom Perini, Operations Manager. I explained the purpose of this inspection and we proceeded to inspect the emission units.

## **EU-CREMATORY3 and EU-CREMATORY4**

I observed EU-CREMATORY3 and EU-CREMATORY4, which are located inside a witness room. I looked at the temperature charts for each cremation unit and observed that the emission unit identification on the temperature charts did not match each emission unit permit name. I informed Tom that the records must correctly identify each associated emission unit name.

I observed that the temperature record for December 14, 2022, indicated that the permittee failed to maintain a minimum temperature of 1600°F in the EU-CREMATORY3 secondary combustion chamber. The December 14, 2022, record indicates that the temperature was approximately 1575°F for approximately 1-hour. I informed Tom that this constitutes a violation of PTI 113-18A, FG750, III.1, which states, "The permittee shall not combust waste in any crematory in FG750 unless a minimum temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained." Failing to maintain a minimum temperature of 1600 degrees F also constitutes a violation of R 336.1910, which

states, "An air-cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law." These noncompliances shall be cited in a violation notice.

## **EU-CREMATORY5** and **EU-CREMATORY6**

I observed EU-CREMATORY5 and EU-CREMATORY6 which appeared to be properly maintained. I observed the control panel on each emission unit. The EU-CREMATORY5 secondary combustion chamber was operating at 1648°F. EU-CREMATORY6 secondary combustion chamber was operating at 1649°F.

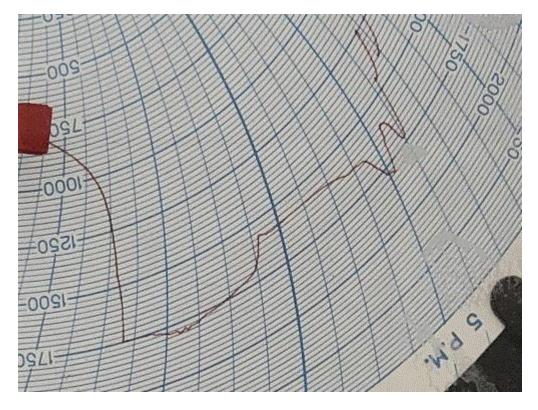
A review of the EU-CREMATORY5 temperature chart record for 12/14/2022 indicates that the permittee failed to maintain a minimum temperature of 1600°F in the EU-CREMATORY5 secondary combustion chamber. The record indicates the secondary combustion chamber temperature oscillated above and below 1600°F during multiple cremations. I informed Tom that this constitutes a violation of PTI 113-18A, FG1200, III.1, which states, "The permittee shall not combust waste in any crematory in FG1200 unless a minimum temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained." Failing to maintain a minimum temperature of 1600 degrees F also constitutes a violation of R 336.1910, which states, "An air-cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law." These noncompliances shall be cited in a violation notice.

## CONCLUSION

Southern Michigan Cremation Services R.O. Inc., is in violation of PTI 113-18A, FG1200, III.1, FG1200, III.1, and R 336.1910, which shall be cited in a violation notice.



Image 1(20221215\_092208): EUCREMATORY4 (left) and EUCREMATORY3 (right) in the witness room.



<u>Image 2(20221215\_092255)</u>: Close-up of EUCREMATORY3 temperature chart. The record indicates that the permittee failed to maintain a minimum temperature of 1600°F. The December 14, 2022, record indicates that the temperature was approximately 1575°F for approximately 1 hour.



<u>Image 3(20221215\_094221)</u>: EUCREMATORY6 (left) and EUCREMATORY5 (right), with a lift table in front. The lift table has a ram that is used as a mechanical assist when inserting a charge. The operator attaches the table to the cremation unit to maximize control.

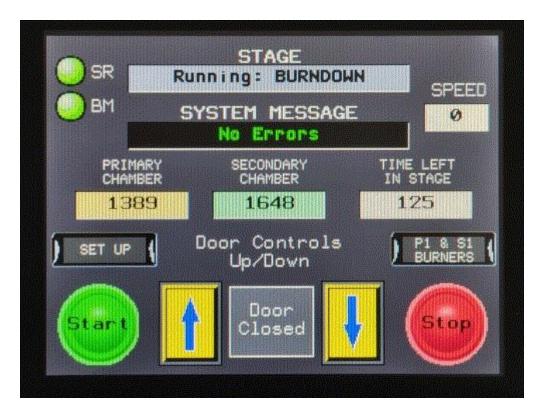
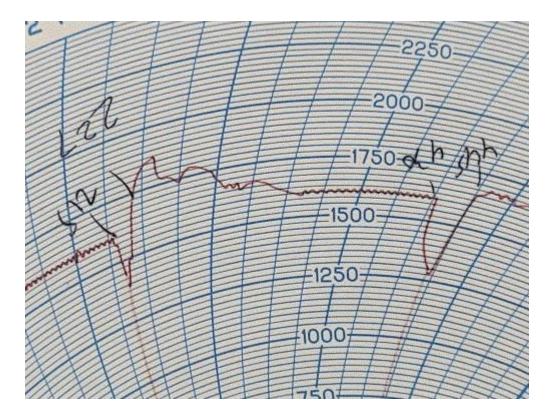


Image 4(20221215 094259): Close-up view of EUCREMATORY5 digital control panel.



<u>Image 5(20221215 100103)</u>: Close-up view of the EUCREMATORY5, which is incorrectly identified as No.3 on the temperature chart. The 12/14/22 chart indicates that the secondary combustion chamber temperature repeatedly oscillated below 1600F during multiple cremations.



<u>Image 6(20221215 093958)</u>: A state-of-the art cremains processing center, with an air-tight processing chamber and particulate emission control.

NAME Abbit Umarchi

DATE 1/5/2023 SUPERVISOR JOYCE

https://intranet.egle.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=248... 1/5/2023