

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

N712559690

FACILITY: Sunset Memorial Gardens		SRN / ID: N7125
LOCATION: 2811 S State Street, IONIA		DISTRICT: Grand Rapids
CITY: IONIA		COUNTY: IONIA
CONTACT: Gabe Crum , Operator		ACTIVITY DATE: 09/03/2021
STAFF: Eric Grinstern	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced on-site inspection		
RESOLVED COMPLAINTS:		

Unannounced on-site inspection of Sunset Memorial Gardens.

FACILITY DESCRIPTION

The facility is a crematorium located on the grounds of a cemetery. The facility is permitted to operate two cremation units (EUINCINERATOR and EUINCINERATOR2). Each of the units are located in separate buildings on the southeast portion of the property.

REGULATORY OVERVIEW

The facility has one air use permit, Permit to Install (PTI) No. 338-01A, issued on October 18, 2013. The permit allowed for the addition of EUINCINERATOR2 along with the already existing EUINCINERATOR, which was originally permitted under PTI 338-01. Permit to install No. 338-01 was voided with the issuance of PTI No. 338-01A, and the requirements for EUINCINERATOR were incorporated into the new permit without any changes.

COMPLIANCE EVALUATION

At the facility EG met with Gabe Crum, crematorium operator. Mr. Crum provided a tour of the crematorium and records review. Additionally, following the inspection, staff communicated with the owner, Lisa Lehman.

During the inspection, proper COVID 19 safety was practiced.

Below is an evaluation of compliance based on PTI No. 338-01A.

EUINCINERATOR – Industrial Equipment & Engineering Cremation Unit

The facility has not operated this unit since shortly after EUINCINERATOR2 was installed with the issuance of PTI No. 338-01A in October 2013. At this time the facility does not plan to ever restart the unit.

EUINCINERATOR2 – Matthew International Cremation Unit

EMISSION LIMITS

The permit limits PM emissions to 0.2 lb/1,000 lbs of gas.

Compliance with the emission limit can be demonstrated through compliance testing, which has not been requested yet. Compliance is also based on proper operation of the unit, including the afterburner.

MATERIAL LIMITS

The permit allows only the burning of pathological wastes, which includes human remains. Based on the facility records and statements during the inspection, only human remains, including the cardboard box housing the human remains, are burnt in the incinerator.

The permittee is restricted to charging no more than 750 pounds per charge in EUINCINORATOR2. Review of the facility records show that they only charge one body at a time, as required by state law. Review the records showed no charges that exceeded 750 pounds.

The permittee is restricted to burning only natural gas or propane. During the inspection, no other fuel was observed outside of the allowed fuel sources.

PROCESS/OPERATIONAL RESTRICTIONS

The permittee is prohibited from combusting waste unless a minimum temperature of 1600 degrees F and a minimum retention time of 1.0 second in the secondary combustion chamber is maintained.

Compliance with the 1.0 second minimum retention time is based on the design of the unit as permitted.

The facility is required to monitor and record the temperature of the secondary combustion chamber on a continuous basis. The facility is monitoring and recording the temperature on a continuous basis. At the time of the inspection, the temperature was 1527 degrees. Mr. Crum stated that they do not load the combustion chamber until the secondary combustion chamber reaches 1250 degrees. The owner later clarified that the unit has an interlock that prevents the combustion chamber from firing until the secondary combustion chamber reaches 1475 degrees. The temperature set point was 1525 degrees at the time of the inspection. The facility believed that PTI No. 338-01A allowed for operation of the unit with a secondary combustion temperature of 1500 degrees, and that they were subsequently approved to operate at 1450 degrees via a permit addendum. The facility appears to have mistakenly confused the minimum secondary combustion chamber temperature for EUINCINERATOR, which is 1500 degrees, with the minimum secondary combustion chamber temperature for EUINCINERATOR2, which is 1600 degrees. The facility's permit was not modified to allow for operation of EUCINCINERATOR2 with the secondary combustion chamber below 1600 degrees.

Review of the paper chart temperature records for the past couple years showed consistent readings for the secondary combustion chamber at approximately 1525 degrees.

DESIGN/EQUIPMENT PARAMETERS

The facility is required to install and maintain a device to monitor and record the temperature in the secondary combustion chamber on a continuous basis. The device and records were observed during the inspection.

The facility is required to maintain a scale to verify the charge weight as required by SC II.2. During the inspection a digital gurney scale was observed.

CONCLUSION

Based upon the observations and information obtained during this inspection, the facility appears to be in compliance with applicable air quality rules and regulations, with the exception of the following, for which a violation notice will be issued:

Failure to maintain a minimum temperature of 1600 degrees in the secondary combustion chamber while combusting waste in accordance with Special Condition III.1 of PTI No. 338-01A.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not combust waste in EUNCIINERATOR2 unless a minimum temperature of 1600°F and a minimum retention time of 1.0 seconds in the secondary combustion chamber are maintained. (R 336.1301, R 336.1331, R 336.1910)

NAME *Eric Gunstam*

DATE 9/10/2021

SUPERVISOR *[Signature]*
/pe text here