

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

M417338305

FACILITY: SUNSET HILL CEMETARY		SRN / ID: M4173
LOCATION: G-4413 FLUSHING RD, FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Wes Warren , Assistant Head Grounds Keeper		ACTIVITY DATE: 01/12/2017
STAFF: Nathaniel Hude	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: This was a scheduled, announced inspection with the most recent permit issued June 20, 2016 and began operation on October 20, 2016.		
RESOLVED COMPLAINTS:		

**Inspection Report**

**M4173- Sunset Hills Cemetery**  
G-4413 Flushing Road  
Flint, MI 48504

**Inspection Date:**

1/12/17

**Facility Contacts:**

Wes Warren, Assistant Head Grounds Keeper, 810-732-0260  
Robert Kopacz, Head Grounds Keeper

**MDEQ AQD Personnel:**

Nathan Hude – 517-284-6779, [huden@michigan.gov](mailto:huden@michigan.gov)

**Facility Description:**

Sunset Hills Cemetery is a privately owned cemetery that was established in 1925. The cemetery offers cremation services which are provided using 3 separately permitted human crematories.

The cemetery is located near the intersections of Flushing Road and Linden Road. To the south is Flushing Road, the Flint River and the Flint Waste Water Treatment Plant. To the east is I-75 and another cemetery called New Calvary Cemetery; to the north is Pasadena Avenue; and to the west is a library, the Genesee Valley Regional Center which is a juvenile detention center, and sporadic housing.

**Applicable Regulations:**

PTI 83-16 for a natural gas human crematory  
PTI 2-84I for a natural gas human crematory  
PTI 1115-91 for a natural gas human crematory

**Previous Inspections:**

None found on record

**Previous Violations:**

None found on record

**Recent Complaints (within 2 years):**

None found on record

**Number of Violations Found During this Inspection:**

None

**Inspection Key Concerns:**

None

**MAERS Reporting**

No, not applicable

**MAERS Emission Unit List**

None

### Inspection Summary

I made contact with the company and coordinated this inspection about two weeks ahead of time due to the nature of the business.

I arrived at Sunset Hills at 10:00am. It was a cloudy day with sleet and snow; all three device exhaust stacks are visible from the parking lot and I did not observe any visible emissions or odors as I approached the building. The crematory is located on the North West side of cemetery grounds. I entered through the door where I met Wes and provided him with a copy of my business card. The room I entered was where the devices were located. I informed Wes that the best way to perform the inspection was to go through the permits one at a time and ensure the special conditions were being met as written. The crematory's are fairly close together and while inside looking on the control panel side they are lined up in permit date sequence with 2-84I being on the right, 1115-91 in the middle, and 83-16 is located on the left.

We began the inspection with 2-84I. This crematory is used for viewing and the door to the crematory is enclosed in a small room that has a viewing window. This device was not operational during the inspection. All of the special conditions were reviewed and checked as follows:

SC11. Visible emissions from the incinerator shall not exceed 20%.

*The incinerator was not operational during the inspection, yet Wes and I discussed visible emission mitigation.*

SC12. Proper operation and adequate maintenance of the incinerator to control emissions is required. Wes informed me that the device had recently (within 2 years) went through a vendor maintenance service which performed scheduled and un-scheduled required maintenance.

SC13. The exhaust gases discharge unobstructed vertically with a max stack diameter of 20" and not less than 14' above ground level.

*I estimated all three the stack diameters to be 18-20 inches, the stack heights are at least 25 feet and the exit is unobstructed.*

SC14. Shall not operate unless an automatic control system for the afterburner is maintained.

*Yes, I verified it was installed.*

SC15. Shall not burn waste other than Type 4.

*The facility only cremates human bodies and does not accept any sort of organic wastes otherwise.*

SC16. Shall not operate unless a minimum temperature of 1400°F and a retention of 0.5 seconds in afterburner. This device does not have a temperature recorder or monitor as it is not required by the permit. According to Wes, during the previously mentioned maintenance, the temperature was tested at the exhaust to ensure this condition was being met and is checked every couple of years. There is also a sight glass for checking and monitoring the flame.

1115-91, this device was operating during the inspection. The exhaust gases were at 1800°F on the digital monitor.

SC14. The PM shall not exceed 0.20 lbs per 1000 lbs of exhaust gas corrected to 50% excess air.

*Due to the complexity of this condition, and the lack of monitors or testing requirements, this condition could only be verified by observing a lack of visible emissions.*

SC15. Visible emissions from the incinerator shall not exceed 20%.

*During my approach to the facility and while leaving the facility, I observed the stacks for approx. 5 minutes each time and did not observe any VE's.*

SC16. Shall not operate unless the afterburner is installed and operating properly.

*The afterburner was definitely installed and a digital readout on the control panel stated it was operating at 1800°F.*

SC17. The disposal of collected ash shall be performed in a manner which minimizes the introduction of contaminants to the outside air.

*I did not observe the collection of ashes, but did see ash that was collected. It appeared that the operators performed the collection in a careful and respectful manner. There was no evidence of dust or ash on any of the crematory housing, tables, or related equipment in the room.*

SC18. The exhaust gases discharge unobstructed vertically with a max stack diameter of 20" and not less than 14.7' above ground level.

*I estimated all three the stack diameters to be 18-20 inches, the stack heights are at least 25 feet and the exit is unobstructed.*

SC19. Shall not burn waste other than Type 4.

*The facility only cremates human bodies and does not accept any sort of organic wastes otherwise.*

SC20. Shall not operate unless equipped with a manual timer switch with operating instructions, to ensure the use of the afterburner when in use.

*This was located on the devices control panel.*

SC21. Proper operation and adequate maintenance of the crematory to control emissions is required. *Based on the conditions of the crematory, the lack of visible emissions, and the maintenance performed as discussed with Wes, this condition is being met.*

83-16, this device was operating during the inspection. The device was permitted on June 20, 2016 and the first use was October 20, 2016. The permit is in a different format than the previous permits.

#### I. EMISSION LIMITS:

1. PM, 0.20 lbs / 1000 lbs of gas.

*This can only be verified via stack testing, based on the absence of visible emissions, stack testing is not required or will be requested at this point.*

#### II. MATERIAL LIMITS:

1. Shall only burn human Pathological waste and associated materials.

*The facility only cremates human bodies and does not accept any sort of organic wastes otherwise.*

2. Shall not charge more than 1,000 lbs per charge.

*Weights of the deceased are recorded by hand on the temperature chart along with the date of cremation, no weights were logged over this amount. The facilities practice is to only cremate one body at a time.*

3. Shall only burn natural gas in the crematory.

*There is no other option for this device; there are no fuel tanks installed near or around the devices.*

#### III. PROCESS / OPERATIONAL RESTRICTIONS:

1. Shall not operate unless a minimum temperature of 1600°F is maintained with a retention time of 1.0 second in the afterburner.

*The retention time cannot be checked, and if there was a problem it would be evident in visible emissions. The temperature recording chart indicated that the average temperature of the afterburner was 1700°F.*

2. The incinerator shall be installed, maintained, and operated in a satisfactory manner to control emissions from EUCREMATORY3.

*Based on the conditions of the crematory, the lack of visible emissions, and the maintenance performed as discussed with Wes, this condition is being met.*

#### IV. DESIGN / EQUIPMENT PARAMETERS

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature in the secondary combustion chamber of EUCREMATORY3 on a continuous basis.

*A circular temperature recording chart is in use for the device. It begins recording upon startup of the device and stops after the cooldown period of shutdown. Each chart has 1 or more days recorded on it depending on the amount of cremations performed. The day, weight, and assigned identification number are recorded by hand on the chart for recordkeeping purposes.*

2. The permittee shall maintain a scale at the facility for the purpose of verifying the charge weight as required by SC II.2

*The permittee has special hydraulic lift carts used for unloading the bodies from the transport vehicle and loading of the bodies into the crematory that has scales. These scales are used for writing the body weight on the temperature recording charts.*

#### V. TESTING / SAMPLING

Na

#### VI. MONITORING / RECORDKEEPING

1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.

*All records were reviewed since the October 20, 2016 start up. The records are on the circular temperature recording charts and are all inclusive as required by this permit.*

2. The permittee shall monitor and record the temperature in the secondary combustion chamber of EUCREMATORY3 on a continuous basis.

*A circular temperature recording chart is in use for the device. It begins recording upon startup of the device and stops after the cooldown period of shutdown. Each chart has 1 or more days recorded on it depending on the amount of cremations performed.*

3. The permittee shall keep, in a satisfactory manner, daily records of the time (duration of burn), description and weight of the charge combusted in EUCREMATORY3, as required by SC II.2. The permittee shall keep all records on file and make them available to the Department upon request.

*All records were reviewed since the October 20, 2016 start up. The records are on the circular temperature recording charts and are all inclusive as required by this permit.*

4. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, records on a calendar quarter basis of the periods of time when only pathological waste is burned in the incinerator, as required by

40 CFR 60.50c(b). The permittee shall keep all records on file and make them available to the Department upon request.

*Only human pathological waste is cremated, thus the records are sufficient as detailed in previous condition responses.*

5. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, secondary combustion chamber temperature records for EUCREMATORY3, as required by SC VI.2. The permittee shall keep all records on file and make them available to the Department upon request.

*A circular temperature recording chart is in use for the device. It begins recording upon startup of the device and stops after the cooldown period of shutdown. Each chart has 1 or more days recorded on it depending on the amount of cremations performed.*

6. The permittee shall keep, in a satisfactory manner, a record of all service, maintenance and equipment inspections for EUCREMATORY3. The record shall include the description, reason, date and time of the service, maintenance or inspection. The permittee shall keep all records on file and make them available to the Department upon request.

*Wes maintains the records of maintenance in a binder, a review found the procedure to be sufficient.*

#### VII. REPORTING

Na

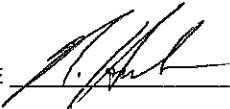
#### VIII. STACK / VENT RESTRICTIONS:

1. The exhaust gases discharge unobstructed vertically with a max stack diameter of 20" and not less than 14.7' above ground level.

*I estimated all three the stack diameters to be 18-20 inches, the stack heights are at least 25 feet and the exit is unobstructed.*

Based on my visible inspection, referencing of permit conditions, and review of associated records, it appears Sunset Hills Cemetery is in compliance with federal and state rules as well as the applicable permits.

NAME



DATE

1-16-17

SUPERVISOR

