

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated Inspection**

N833928802

<b>FACILITY:</b> Great Lakes Cremation Services LLC		<b>SRN / ID:</b> N8339
<b>LOCATION:</b> 29547 Costello Dr, NEW HUDSON		<b>DISTRICT:</b> Southeast Michigan
<b>CITY:</b> NEW HUDSON		<b>COUNTY:</b> OAKLAND
<b>CONTACT:</b> Dave Mathieu , Shop Manager		<b>ACTIVITY DATE:</b> 03/02/2015
<b>STAFF:</b> Robert Elmouchi	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Self-initiated inspection.		
<b>RESOLVED COMPLAINTS:</b>		

On March 2, 2015, I conducted an unannounced self-initiated inspection of Great Lakes Cremation Services LLC (Great Lakes) located at 29547 Costello Dr, New Hudson, Michigan. This facility is uniquely identified with the SRN of **N8339**. 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 Permit to Install (PTI) No. 232-09B.

I entered the site and was greeted by Mr. Dave Mathieu, Shop Manager, and Mr. Doug Mathieu, Crematory Operator. I presented AQD photo employee identification and explained the purpose of the inspection.

On the date of the inspection all three human crematoriums appeared to be operating properly. Dave stated that the animal crematorium is rarely used because Great Lakes has not actively pursued customers for animal cremations.

#### **FACILITY INSPECTION**

Note: The permittee uses a different numbering system to identify each cremation unit. The cremation units are numbered sequentially from left to right, therefore EUCREMATORY4 is Unit #3 and EUCREMATORY3 is Unit #4.

Great Lakes incinerates only pathological wastes in compliance with the permitted material limits. The secondary combustion chamber chart recorder records appear to indicate that a minimum temperature of 1600°F is routinely maintained during the cremation process. I collected copies of records (hard copies attached), which appear to indicate compliance with the permit required recordkeeping and minimum secondary combustion chamber temperature.

The emission units appeared to be properly maintained. A recordkeeping review appeared to demonstrate compliance with monitoring and recordkeeping requirements. I observed that Great Lakes maintains a redundant recordkeeping system where information on each charge (human remains and associated materials) is recorded on multiple documents and the charge container. Mr. Dave Mathieu and I discussed the importance that Great Lakes places on maintaining detailed records to insure that the cremains are delivered to the correct person. It appears that Great Lakes uses best management practices in their recordkeeping system.

In 2013, Great Lakes installed a low-definition closed circuit color television system. A single video camera was installed on the roof in a position where all four exhaust stacks can be observed. The low-definition image appears to be capable of displaying visible emissions with opacities greater than 35 percent. It should be noted that a closed circuit television cannot be used to conduct a valid Method 9 visible emission observation. Via the closed circuit system, I did observe an approximately half-minute or less of visible emissions from Unit #3 during the first five minutes of incineration. This short duration of visible emissions is typical for a properly operating crematorium. Via the closed circuit system, I did not detect visible emissions from Unit #2 during the first ten minutes of incineration.

I discussed crematory operation with Dave and Doug. I was informed that for the first and second run of the day, Great Lakes will preheat the secondary combustion chamber about 20 minutes longer than required by the cremation unit software. Great Lakes uses a longer preheat time to accommodate the fact that even though the secondary combustion chamber air temperature has reached the required minimum operating temperature, the refractory bricks in the secondary combustion chamber are still fairly cool. This set of conditions can cause the secondary combustion chamber temperature to oscillate during the early stages of cremation, which may result in less than optimal emissions control performance. Therefore, preheating the secondary combustion chamber for about an extra 20 minutes appears to be a best management practice.

**CONCLUSION**

Great Lakes Cremation Services LLC appears to be in compliance with all evaluated permit conditions.

NAME *Robert L. Marchetti*

DATE *3/13/15*

SUPERVISOR *CJE*