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Genesee

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

N366645283

FACILITY: PET REST GARDENS		SRN / ID: N3666
LOCATION: 7185 GILLETTE RD, FLUSHING		DISTRICT: Lansing
CITY: FLUSHING		COUNTY: GENESEE
CONTACT: Sharron Whalen , Manager		ACTIVITY DATE: 07/24/2018
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled inspection of facility last inspected in 2006.		
RESOLVED COMPLAINTS:		

On 7.24/2018, the Michigan Department of Environmental Quality, Air Quality Division, conducted an unannounced, scheduled inspection of Pet Rest Gardens, a facility which AQD last inspected in 2006.

Facility environmental contacts:

Sharron Whalen, Manager; 810-659-6114; keylorepetrest@yahoo.com

Bill Keillor, Manager; 810-659-6114; keylorepetrest@yahoo.com

Facility description:

Pet Rest Gardens, also known as Key-Lore Pet Rest Gardens, is a full service pet care facility, as described on their website. They provide cremation services for deceased pets, with a permitted veterinary crematory incinerator.

Emission Units:

Emission unit	Emission unit description	Permit to Install (PTI) No.	Compliance status
Veterinary crematory incinerator	Multi-chamber incinerator with primary and secondary chamber (afterburner)	337-92	Compliance

Regulatory overview:

This company has a Permit to Install (PTI), No. 337-92, issued on 6/22/1993, for a veterinary crematory facility. They are permitted to cremate the remains of deceased pets, but not any human remains. They are considered a *minor source* rather than a major source for criteria air pollutants, because they do not have the potential to emit of 100 tons per year or more of any one of these pollutants. *Criteria pollutants* are those for which there is a National Ambient Air Quality Standard (NAAQS): carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds, lead, particulate matter smaller than 10 microns (PM-10), and particulate matter smaller than 2.5 microns (PM2.5).

The facility is considered to be a minor source, or *area source*, for Hazardous Air Pollutants (HAPs). A major source of HAPs has a PTE of 10 TPY or more of a single HAP, or 25 TPY or more of aggregate HAPs.

Fee status:

This facility is not a Category I fee subject source, because it is not a major source for criteria pollutants. It is not a Category II fee-subject source because it is not a major source for Hazardous Air Pollutants (HAPs), nor is it subject to federal New Source Performance Standards. Additionally, it is not Category III fee-subject, because it is not subject to federal Maximum Achievable Control Technology standards. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

A U.S. Environmental Protection Agency (EPA) Consent Order, EPA-5-1997-113(a) WI-10 was entered in

9/19/2018

1997 to address concerns regarding visible emissions. The order automatically terminated on 5/23/1998, one year after being signed by the Director of EPA's Air and Radiation Division, Mr. David Kee.

The most recent AQD inspection of this facility prior to today's visit was done by AQD's Brad Myott in 2006.

Location:

The location is rural, mostly wooded area, with scattered residences nearby. The closest residences are about 300 feet to the northeast, 375 feet to the east, and 200 feet to the south. To the west is a large, wooded area.

History:

AQD has not received any complaints regarding this facility since 1995. There were a number of smoke-related complaints during 1994-1995. I could not research further back in history, as the AQD 1991-1993 file for this facility was sent to the State of Michigan Record Center for storage, at some point in the past.

In 1997 the company and the U.S. EPA entered a Consent Order, EPA-5-1997-113(a) WI-10, to address concerns regarding visible emissions. The order contains a requirement for installation of a visible emissions monitor, and requires it to be operated and maintained in good working order. It also requires emissions from the incinerator to be maintained in accordance with Michigan SIP Rules (Michigan Air Pollution Control Rules) 301(1) and 901. Rule 301(1) limits opacity of visible emissions to a 6-minute average of no more than 20% opacity, except for one 6-minute average per hour not to exceed 27%. Rule 901 prohibits emissions which cause a nuisance. The order was to automatically terminate one year after the 5/23/1997 signature by the Director of EPA's Air and Radiation Division, Mr. David Kee.

Safety equipment required:

None.

Arrival:

This was to be routine, unannounced inspection. I conducted a check for offsite odors before stopping at the facility. No odors were detected either north or south of the facility, on Gillette Road. Weather conditions were 72 degrees F and lightly raining, with winds 5 miles per hour (mph), out of the west. At 11:06 AM, I parked at the facility, near the office. neither smoke nor odors were detectable.

I met with Ms. Sharron Whalen, Manager, and explained the reason for my visit. She advised me that they were preparing to operate the incinerator. I asked as to their operating schedule. She informed me that they run the incinerator almost every day. She also explained the nature of their business, providing a full care pet care facility, including boarding, grooming, as well as after care, for the remains of deceased pets.

Ms. Whalen explained that in 1993, when this incinerator was shipped to them, some of the fire brick shifted. It is my understanding that this is what led to complaints of opacity during 1994-1995.

Inspection:

Ms. Whalen showed me the incinerator unit, where the remains of a deceased pet had been placed in the primary burn chamber, which has different spaces or levels for cremations of more than one deceased pet. I did not see any inappropriate materials in the incinerator.

The secondary chamber for the unit was fired up, to heat the secondary chamber to a temperature of 1,550 or 1,555 degrees F, before the main burner turns on. Progress was gradual and steady, as

measured on a temperature sensor. Only heat waves were visible from the exhaust stack. The stack exhausts unobstructed, vertically upwards.

When the unit began the cremation process, I immediately stepped outside, to check the exhaust stack for any visible emissions. Opacity was 0%. Only heat waves were visible.

PTI No. 337-1992 has 14 general conditions, applicable to facilities in general. The special conditions start with number 15. Compliance with the special conditions was checked, as follows:

Special Condition (SC) 15 specifies an emission limit of 0.20 lbs per 1,000 lbs of exhaust gases, corrected to 50% excess air. A stack test would be necessary to verify compliance with this emission limit. Based upon observations made today and during the other most recent inspection, the incinerator appeared to be maintained and operating properly. Therefore, AQD is not pursuing stack testing for this unit.

SC 16 limits visible emissions to a 6-minute average of 20% opacity, except as specified in Rule 301(1) (a), which allows a single 6-minute average per hour of not more than 27% opacity. Opacity today was 0%, as seen throughout the course of the inspection. The facility is therefore in compliance with this condition.

SC 17 states that the applicant shall not operate the incinerator unless the afterburner is operating properly. As seen today, the afterburner appeared to be operating properly.

SC 18 requires that collected ash be disposed of in a manner which minimizes the introduction of the air contaminants to the outer air. I was shown the cremains, or ashes of deceased pets who had been cremated in the incinerator, previously. There were occasional fragments of calcified bones in with the ashes. Ms. Whalen explained that they take these cremains and process them in an enclosed grinder, to make them more uniform in size. The cremains are then returned to their respective families. I saw no evidence of ashes being spilled or introduced to the outer air. It is my understanding that the grinder has a vacuum system to prevent the spillage of any dust. The facility appears to be complying with this condition.

SC 19 requires exhaust gases from the crematorium incinerator shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 16 inches at an exit point not less than 18 feet above ground level. The facility appeared to be meeting this requirement, as there was no rain cap or other obstruction, and the stack appeared to be of the proper dimensions.

SC 20 states that the applicant shall not burn any waste in the incinerator other than animal remains. I saw that the body of one deceased pet had been placed in the primary chamber when they were preparing to start up the incinerator. Two other deceased pets were then placed into different shelves or areas of the unit. I was informed that there are dividers between the remains, to provide for semi-private cremations. I did not observe any inappropriate materials being put into the unit.

SC 21 requires proper operation and adequate maintenance of the incinerator to control emissions. I was advised that they have the operations manual book for this incinerator. Additionally, the unit appeared to be operating properly today, and it appeared to be maintained in good condition. I was informed that they are trained to service the unit themselves, and do all the regular maintenance for the unit. I was advised that for larger maintenance items, they have company representatives come out. Ms. Whalen explained BNL staff came out to rebrick the hearth of the unit in 2016, and that she visited them in January 2018 for some questions she had. The facility appears to be in compliance with this condition.

SC 22 prohibits operation of the incinerator unless the automatic opacity monitor that regulates both the primary and secondary chamber is installed and operating properly. There was 0% opacity. The automatic opacity monitor was operating properly, I was advised.

SC 23 prohibits operation of the incinerator unless a minimum temperature of 1600 degrees F and a minimum retention time of 3 seconds is maintained. The permit engineer's evaluation notes for PTI No.

337-92 note that the unit is designed to have a 3-second retention time. At 12:07 PM, the actual temperature of the secondary chamber was 1,601 degrees F. The set point of the unit was 1,600 degrees F. I was told that the unit usually runs between 1,600-1,650 degrees F. I observed no visible emissions from the exhaust stack.

SC 24 limits the loading rate of animal remains for the incinerator to 225 lbs/batch, 400 lbs/day, and a burn rate of 75 lbs/hour. Monthly loading records including load size and time of loading are to be kept for at least two years, and made available to the AQD upon request.

Ms. Whalen showed me their recordkeeping, including daily log sheets. They were presently on cremation #357 for 2018. It is my understanding that they have done an additional 55 cremations for veterinarians, for a total of about 400 year to date. In the course of an average year, they do about 650-700 cremations.

Per my request, Ms. Whalen provided photocopied examples of recent loading records. Please see attached. They appear to be keeping the required data. They appear to be complying with the limit of 225 lbs/batch. Batch sizes for recent dates were as follows:

- 7/5/2018: 95 lbs
- 7/6/2018: 106 lbs
- 7/7/2018: two batches; 46 and 43 lbs
- 7/9/2018: 58 lbs
- 7/10/2018: 110 lbs
- 7/11/2018: 43 lbs
- 7/13/2018: 125 lbs
- 7/16/2018: 173 lbs
- 7/18/2018: 144 lbs
- 7/20/2018: 158 lbs
- 7/21/2018: 81 lbs
- 7/23/2018: 138 lbs

Based on the above records, the facility appears to be complying with the 400 lbs/day limit. I was advised that they would never be able to run 400 lbs per day. It is my understanding that they do not want to run the incinerator at such a high rate.

SC 25 states that verification of particulate rates may be required via stack testing. As previously mentioned in this report, AQD is not pursuing stack testing of this unit. It appears to be operated and maintained properly, and no complaints have been received since 1995.

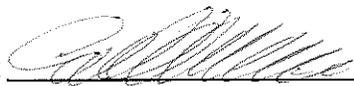
SC 26 require that the applicant provide cold storage/containment for animal remains which will not be incinerated within 12 hours after receiving the remains, or if the incinerator unit is not operable. They have a secure freezer onsite, for the remains of deceased pets. I was offered to examine the inside of the unit, but I declined.

I left the facility at 12:19 PM. There were no visible emissions, and no odors were detectable, as I left the site.

Conclusion:

There were no instances of noncompliance observed. The facility appeared to be in compliance with PTI No. 337-92.

NAME



DATE

9/19/2018

SUPERVISOR

