

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

B600440425

FACILITY: VETERINARY MEDICAL HOSPITAL		SRN / ID: B6004
LOCATION: G 3252 MILLER RD, FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Larry Ehrman , Veterinarian		ACTIVITY DATE: 06/27/2017
STAFF: Nathaniel Hude	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: <i>Minor</i>
SUBJECT: Scheduled coordinated inspection for the new issuance of PTI 208-16.		
RESOLVED COMPLAINTS:		

Inspection Report

B6004- Veterinary Medical Hospital
3252 Miller Road
Flint, MI 48507

Inspection Date:
6/27/17

Facility Contacts:
Dr. Lawrence Ehrman, President, 810-732-0000, drlarrye@aol.com

MDEQ AQD Personnel:
Nathan Hude – 517-284-6779, huden@michigan.gov

Facility Description:
Veterinary Hospital with incinerators for animals.

Permit History:
PTI 208-16, issued 1/31/17: P-16 Firelake crematory incinerator capable of 100 lbs/hr

PTI 303-97, issued 8/1/97: crematory incinerator capable of 100 lbs/hr; upon inspection it was found that this device had been removed for the installation of that permitted under 208-16

PTI 105-731, voided 3/10/09: Shcnumdual 60#/hr type 4 w/ burners

PTI 55-731, issued 6/14/73: Shenandoah 50#/day w/ burners type 4; upon inspection it was found that this device had been removed for the installation of that permitted under 303-97

Copies of PTI's 303-97 and 55-731 were provided to Dr. Ehrman while on site and I also informed him that due to the removal of the devices, I would be voiding both permits.

Applicable Regulations:
PTI 208-16

Previous Inspections:
3/9/05- Brad Myott, no issues
11/5/02- Robert Lamrouex, non-compliance for failure to keep weight and temperature record, no LOV issued

Previous Violations (within 5 years):
None

Recent Complaints (within 2 years):
None found on record

- Number of Violations Found During this Inspection:**
1. PTI Paragraph II.2. Material Limits- charge weight
 2. PTI Paragraph III.1. Process/Operational Restrictions- secondary chamber temperature
 3. PTI Paragraph VI.1. Monitoring/Recordkeeping- animal weights
 4. PTI Paragraph VI.3. Monitoring/Recordkeeping- charge description and burn times

5. PTI Paragraph VI.4. Monitoring/Recordkeeping and 40CFR60Ec- pathological waste quarterly records
6. PTI Paragraph VIII.1. Stack/Vent Restrictions- rain cap installed

Violations found were not cited due to an agreement for immediate compliance as detailed in each Special Condition below.

Inspection Key Concerns:

As detailed in previous paragraph.

MAERS Reporting

No

Inspection Summary

I arrived at approx. 8:20am and met Dr Ehrman in the office. This was a scheduled inspection that I had coordinated the day prior. Dr. Ehrman took me back to the unit which is located outside. The unit was not operating during the inspection. The make, model and fuel type matched what is listed in the PTI Unit Description as checked by data plate on the unit. The remainder of the inspection was completed as per the permit special conditions as detailed below:

I.EMISSION LIMITS

1. PM 0.20 lbs/1000lbs of gas

RESULT: The method of checking compliance with this limit is only through stack testing per general condition 13 of the permit; at this time testing is not being required.

II. MATERIAL LIMITS

1. The permittee shall not burn any waste in EU-CREMATORY01 other than the following: (40 CFR 60.51c) Pathological wastes—As defined in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.51c, pathological waste means waste materials consisting of only human or animal remains, anatomical parts, and/or tissue; the bags/containers used to collect and transport the waste material; and animal bedding. This emission unit shall burn only animal pathological waste and associated materials.

RESULT: Compliance- I confirmed that only animal remains and associated bedding are being cremated in the device.

2. The permittee shall not charge more than 400 pounds per charge in EU-CREMATORY01, where charge is the total weight of the material placed in the incinerator to be combusted. (R 336.1301, R 336.1331)

RESULT: Non-Compliance- I could not verify this in an easy manner as weight records are not easily available. Records could be obtained through pricing for the process which is based on the weight of animals, yet no records of total charge (if more than one animal is loaded) could be provided. Example record keeping documents were sent via email to Dr. Ehrman on 6/28/17 and requested to start tracking immediately.

3. The permittee shall not burn any fuel in EU-CREMATORY01 other than natural gas. (R336.1224, R 336.1225, R 336.1702)

RESULT: Compliance- I verified that only natural gas is used as a fuel source.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not combust waste in EU-CREMATORY01 unless a minimum temperature of 1600°F and a minimum retention time of 0.5 seconds in the secondary combustion chamber are maintained. (R 336.1301, R 336.1331, R 336.1910)

RESULT: Non-Compliance- during a check of the circular temperature charts, I found that approx. 90% of the cremation results were conducted with a secondary combustion chamber temperature range of 1200°F to 1500° F. Dr. Ehrman stated that although it is operating at the lower temperature, he rarely sees smoke from the stack. He also stated that the installer mentioned that the static pressure of the natural gas line feeding the device had less pressure than what is required to where it may be required to install a pressure producing pump. We also discussed the temperature monitoring gauge location, which is located approx. 8 feet above the afterburner. Based on this location, the gauge may be reading less than actual temperature. On 6/28/17, I received a phone call from Mr. Dave Snyder of K&D Diversified who installed the device. I explained the need for the moving of the thermocouple to read the actual temperature of the afterburner device and we discussed the removal of 90% of the rain cap from the stack leaving 10% for structural integrity. The permit application identified 1600°F as the secondary chamber temperature which was then placed in the permit. If the movement of the thermocouple does not resolve the temperature differentiation, increasing the gas feed rate or an

adjustment to the permit temperature limits (if possible) may be required. Action for resolution for this was set for 7/15/17 and will be confirmed by another onsite inspection.

2. The incinerator shall be installed, maintained, and operated in a satisfactory manner to control emissions from EU-CREMATORY01. A list of recommended operating and maintenance procedures is specified in Appendix A.

RESULT: Compliance- based on my discussions with Dr. Ehrman, it appears he is the only individual that operates the unit and appears to be operating it in a manner to control emissions.

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-CREMATORY01 unless the secondary combustion chamber with afterburner is installed, maintained, and operated in a satisfactory manner. (R 336.1301, R336.1331, R 336.1910)

RESULT: Compliance- the afterburner is installed and maintained, confirmed visually.

2. 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 EU-CREMATORY01 on a continuous basis. (R 336.1301, R 336.1331)

RESULT: Compliance- the device is installed yet is located approx. 8 feet above the afterburner device which gives an inaccurate reading. I highly encouraged Dr. Ehrman to have the installation company move the monitor to the afterburner itself.

3. The permittee shall maintain a scale at the facility for the purpose of verifying the charge weight as required by SC II.2. (R 336.1301, R 336.1331)

RESULT: Compliance- A scale is located on site.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R336.1201(3))

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. (R336.1301, R336.1331, 40CFR60.50c(b))

RESULT: Non-Compliance- records for weight are not being maintained in regards to individual animal and charge weight. Example record keeping documents were sent via email to Dr. Ehrman on 6/28/17 and requested to start tracking immediately. Action for resolution for this was set for 7/15/17 and will be confirmed by another onsite inspection.

2. The permittee shall monitor and record the temperature in the secondary combustion chamber of EU-CREMATORY01 on a continuous basis. (R336.1301, R336.1331)

RESULT: Compliance- temperature is being recorded on a circular chart giving primary and secondary temperatures.

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 EU-CREMATORY01, as required by SC II.2. The permittee shall keep all records on file and make them available to the Department upon request. (R336.1301, R336.1331)

RESULT: Non-Compliance- records for weight are not being maintained in regards to individual animal and charge weight. The time of the burn is indicated on the circular temperature chart but is not easy to read. Example record keeping documents were sent via email to Dr. Ehrman on 6/28/17 and requested to start tracking immediately which include burn start and end times. Action for resolution for this was set for 7/15/17 and will be confirmed by another onsite inspection.

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. (40CFR60.50c(b))

RESULT: Non-Compliance- only pathological waste is being incinerated per Dr. Ehrman, yet it is not being properly documented. Example record keeping documents were sent via email to Dr. Ehrman on 6/28/17 and requested to start tracking immediately which includes a column to indicate if non-pathological waste was

added to the charge. Action for resolution for this was set for 7/15/17 and will be confirmed by another onsite inspection.

5. The permittee shall keep, in a manner satisfactory to the AQD District Supervisor, secondary combustion chamber temperature records for EU-CREMATORY01, as required by SC VI.2. The permittee shall keep all records on file and make them available to the Department upon request. (R336.1301, R336.1331)

RESULT: Compliance- temperature is being recorded on a circular chart giving primary and secondary temperatures.

6. The permittee shall keep, in a satisfactory manner, a record of all service, maintenance and equipment inspections for EU-CREMATORY01. 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. (R336.1301, R336.1331, R336.1910)

RESULT: Compliance- no records are available as of yet due to the unit being recently installed.

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted: (40CFR52.21(c)&(d))

1. Maximum Diameter: 14 inches, minimum height above ground: 20 feet.

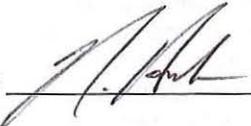
RESULT: Non-Compliance- the stack dimensions appear to be as required for diameter and height yet a rain cap is installed on the unit which effects the pollutant dispersion. I asked Dr. Ehrman to have the rain cap removed. On 6/28/17, I received a phone call from Mr. Dave Snyder of K&D Diversified who installed the device. I explained the need for the moving of the thermocouple to read the actual temperature of the afterburner device and we discussed the removal of 90% of the rain cap from the stack leaving 10% for structural integrity. Action for resolution for this was set for 7/15/17 and will be confirmed by another onsite inspection.

As a ending meeting with Dr. Ehrman, we discussed the following:

1. Have rain cap removed.
2. Create a chart for recording individual animal and total charge weights.
3. Have the secondary chamber temperature gauge moved to either the actual chamber or as close as possible to see if the temperature is actually as permitted, 1600°F.

Based on my inspection, Veterinary Medical Hospital is not in compliance with state of Michigan air quality rules. A follow-up inspection will be conducted after 7/15/17 to confirm conformity of compliance.

This report will be used to void permits 303-97 and 55-731 in accordance with MDEQ memo Procedure for Voiding Permits to Install, dated June 7, 1999.

NAME 

DATE 6/28/17

SUPERVISOR 