

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

N511566578

FACILITY: Lapeer County Animal Control (was LCHD)		SRN / ID: N5115
LOCATION: 2396 W. GENESEE, LAPEER		DISTRICT: Lansing
CITY: LAPEER		COUNTY: LAPEER
CONTACT: Rachel Horton , Chief		ACTIVITY DATE: 03/08/2023
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced inspection, and discussion of proposed plan to replace existing incinerator with a new unit in June or July, 2023.		
RESOLVED COMPLAINTS:		

On 3/8/2023, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an unannounced inspection of the Lapeer County Animal Control (LCAC) incinerator.

Facility description:

LCAC operates a no-kill animal shelter, and uses a crematory incinerator to dispose of deceased animal remains typically one day per month. Occasionally, deceased pets are cremated upon request.

Environmental contacts:

- Rachel Horton, Chief; 810-667-0236, ext. 6235; rhorton@lapeercounty.org

EGLE AQD contacts:

- Dan McGeen, inspector; 517-648-7547; mcgeend@michigan.gov
- David Rauch, inspector; 517-216-0423; rauchd2@michigan.gov

Emission unit:

Emission Unit*	Emission Unit Description	Permit to Install (PTI) Number	Compliance status
Crematory incinerator	Burnswell 200 lb per hour type 4 waste incinerator with afterburner, and 1.52 seconds retention time	918-93	Compliance

*An *emission unit* is any part of a stationary source which emits or has the potential to emit an air contaminant.

Regulatory overview:

This facility is considered a true minor source. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. Criteria pollutants are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur

dioxide, volatile organic compounds, lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns.

This facility is considered a minor or *area source* for Hazardous Air Pollutants (HAPs), because it is not considered to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

PTI 918-93 was issued to the Lapeer County Health Department, on 2/22/1994. On 5/21/2007, PTI 319-69I, which had been issued for an earlier incinerator at the site, was voided, because that unit was no longer in operation. It has been removed from the site.

Fee status:

This facility is not considered fee-subject, as it is not a major source for criteria air pollutants, or for HAPs, nor is it subject to a federal New Source Performance Standard or a Maximum Achievable Control technology standard.

This facility is not required to report annual emissions through the Michigan Air Emission Reporting System (MAERS). Criteria for those facilities which must report to MAERS on an annual basis are identified in AQD-013: Criteria Pollutant Threshold Levels for the Point Source Emissions Inventory.

Location:

The facility is located at a county building at 2396 W. Genesee Road, Lapeer. The surrounding area is a mix of residential and commercial structures. The closest residences are to the west, and there are apartments to the north. A school is located about 1,800 feet to the southwest, and businesses are to the south and southeast.. To the immediate east is another Animal Control building, followed by a fire department.

Facility hours of operation:

- Mon., Tues., Thurs., Fri.: 8-4
- Wed.: Closed to the public, but the incinerator is usually run on a Wed., once per month

Safety apparel required:

Safety glasses with side shields are recommended, and hearing protection, to be used as needed. D. McGeen wore a disposable paper mask out of personal preference, during the COVID pandemic.

Odor evaluation:

- Time of odor evaluation: 9:29 AM
- Weather conditions: Mostly sunny and 37 degrees F, with winds 10 mph out of the NNE
- Odors detected offsite: None

Arrival:

- Arrival time: 9:31 AM
- Visible emissions: None
- Odors detected onsite: None

AQD was represented by inspectors David Rauch and Dan McGeen. This was an unannounced inspection. Upon arrival, AQD staff met an animal shelter employee, and explained the purpose of the visit. They were soon introduced to LCAC Chief Rachel Horton.

Pre-inspection meeting:

The incinerator was not running today, R. Horton explained, as they typically run it once per month. Animal remains are stored in a freezer, for the monthly date of operation. AQD was advised that they use the unit for animal remains which were tested for rabies, animals which were killed alongside roads, and for occasional pet cremation, upon request.

AQD explained that they recently learned from an Ingham County animal crematory facility, Paws Upon the Heart, that they would be applying for a PTI to relocate the existing LCAC crematory incinerator to their site in Holt, and that LCAC would potentially be acquiring a new unit.

R. Horton acknowledged this, and said the existing incinerator was to be removed from the LCAC building this spring, through a large overhead door that was installed this winter. From what she has been told, it will be refurbished by the original manufacturer, Burnswell, in Texas, and then shipped back to Michigan, to its future location in Ingham County. This existing unit is too large for LCAC's needs, and uses too much fuel, they have found. She added that hope to have a brand-new crematory incinerator for animal remains installed around June or July of this year.

D. McGeen explained that the proposed new unit will require a PTI application to be approved, prior to the installation. He indicated that they should fill out the PTI application well in advance of the date they would like to actually install the proposed unit. He added that he would send links to the AQD permit to install application form, and a list of information needed to fill out a complete application for this kind of process. During the inspection, he provided a hardcopy of the existing air permit, PTI 918-93, as the facility was not aware of its existence.

Inspection:

AQD staff were shown the incinerator, which was not running. The unit is equipped with a Honeywell temperature recorder, with a circular temperature chart. The ink pen for the recorder does not work, AQD was informed, but because the air permit does not require a temperature recorder, the lack of a working pen does not appear to be a violation. An air permit for a new crematory incinerator would require a temperature monitoring system. The LCAC facility has a weigh scale, for weighing remains. PTI 918-93 does not require this, but an air permit for a new crematory incinerator would contain this as a requirement.

During the inspection, D. McGeen went through the conditions of PTI 918-93, please see below.

Compliance checklist with PTI 918-93:

PTI 918-93 Special Condition No.	Requirement	Comments	Complies?
15.	Rule 331 – The particulate emission rate from the incinerator shall not exceed 0.20 pound per 1,000 pounds of exhaust gases, corrected to 50% excess air.	The incinerator was not operating, and no particulate emissions were seen.	Yes

16	Visible emissions from the incinerator shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a).	The incinerator was not operating, and no visible emissions were seen.	Yes
17	Rules 1001, 1003 and 1004 – Verification of particulate emission rates from the incinerator by testing, at owner’s expense, in accordance with Commission requirements, may be required for operating approval. Verification of emission rates includes the submittal of a complete report of the test results. If a test is required, stack testing procedures and the location of stack testing ports must have prior approval by the District Supervisor, Air Quality Division, and results shall be submitted within 120 days of the written requirement for such verification.	NA, as stack testing is not being required at this time.	NA
18	Applicant shall not operate the incinerator unless the thermal oxidizer is installed and operating properly.	The incinerator was not operating.	Yes
19	Applicant shall not operate the incinerator unless a minimum temperature of 1600° F and a minimum retention time of 1.5 seconds in the thermal oxidizer is maintained.	AQD was advised that they operate the unit only at 1700°F or above. The permit engineer’s evaluation form states that hold time or retention time in the secondary chamber or thermal oxidizer is 1.52 seconds.	Yes
20	The exhaust gases from the incinerator shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 20 inches at an exit point not less than 19 feet above ground level.	The stack appeared to meet these dimensions.	Yes
21	Applicant shall not burn any waste in the incinerator other than the following:	It is AQD’s understanding that they are abiding by this.	Yes

	Type 4 – Human and animal remains, consisting of carcasses, organs and solid organic wastes from hospitals, laboratories, abattoirs, animal pound, and similar sources.		
22	Applicant shall not operate the incinerator unless it is equipped with a thermocouple control system for the afterburner.	AQD was informed that the yearly maintenance inspection sheet from Burnswell, the unit's manufacturer, indicates there is a thermocouple control system.	Yes
23	Proper operation and adequate maintenance of the incinerator to control emissions is required. A list of recommended operating and maintenance procedures is enclosed.	They appear to be following the Incinerator Operation Guidelines (discussed below).	Yes

D. McGeen reviewed the incinerator operation guidelines attached to PTI 918-93 with R. Horton, as follows, with AQD comments in italics.

Incinerator Operation Guidelines to PTI 918-93 (newer air permits have more modern language)

1. Designate a trained operator for your unit and make him responsible for compliance with the state air pollution emission limitations. *AQD was advised that everyone in the building was trained on how to operate this unit. STATUS: COMPLIANCE.*
2. Grates should be cleaned before each day's operation (more often if necessary), and the ashes disposed of properly. *AQD was advised that this is always done. STATUS: COMPLIANCE.*
3. Preheat unit with a small amount of trash, or operate burners for 15 minutes. *AQD was advised that they always preheat the unit. STATUS: COMPLIANCE.*
4. Do not overload. Stay within the given loading rates and follow manufacturer's instructions. *AQD was advised that they stay in the range of 100-300 lbs per charge. STATUS: COMPLIANCE.*
5. Schedule charges so as to open the charging door as infrequently as possible. *AQD was advised that they don't really open the door, once an operational cycle has begun. STATUS: COMPLIANCE.*
6. Burn only the type of wastes that the incinerator is suited. Follow manufacturer's instructions. *AQD was advised that this is being followed. STATUS: COMPLIANCE.*
7. Keep the combustion air adjusted as per the manufacturer's instructions. *AQD was informed that they are doing this, and they frequently check for smoke, to see if combustion air needs adjusting. STATUS: COMPLIANCE.*
8. Observe the stack frequently and adjust your operation as necessary to eliminate smoke and fly-ash. *AQD was advised that they look and smell, to check for any signs of smoke or odors, when the incinerator is operating which might indicate a problem. STATUS: COMPLIANCE.*
9. A copy of the manufacturer's manual and this guideline should be posted near your incinerator. *AQD was advised that the incinerator manual and a blueprint are kept in the office. STATUS: COMPLIANCE.*
10. Make quarterly inspections to check and service all equipment. If you do not have qualified personnel available for proper inspections, a service contract with a reputable manufacturer is advisable. *AQD was advised that every year, the manufacturer, Burnswell, performs maintenance on the unit, and*

provides them a copy of their inspection report, which they keep for reference. AQD was informed that this would be done in April or May this year. STATUS: COMPLIANCE.

R. Horton indicated that they can reach out to AQD in advance of a future date of operation, so that AQD can observe the existing unit in operation.

Post-inspection follow up:

On 3/9/2023, D. McGeen emailed R. Horton, to provide links to the AQD PTI webpage on filling out an application, as well as the information needed for filling out a complete application for a pathological waste incinerator.

On 6/5/2023, at 1:47 PM, D. McGeen called LCAC, to check on the status of the proposed new crematory incinerator and submittal of a PTI application. R. Horton explained that the manufacturer, Burnswell, has not been able to get the necessary parts to build the new unit, so construction has been delayed. She explained that she has wanted to wait until the design of the unit is finalized, before submitting the air permit application, in case the design should change. In the meantime, the existing unit is still onsite, she added, but they have only rarely been using it. When the new unit is permitted and installed, she explained that they will let AQD know, so that an inspection can be arranged, on one of the infrequent days it will be used.

Conclusion:

No instances of noncompliance were identified.

NAME 

DATE 6/5/2023

SUPERVISOR 