

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

William R. Snodgrass Tennessee Tower, 15th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243

APC-PERM-G-01-Pet Crematory Permitting - 081417

Guidance on Permit Requirements for Animal/Pet Crematories

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SIGNATURES:

Technical Secretary

Jone P. She

Michille W. averly

Drafter / Preparer

PURPOSE

The purpose of this guidance is to summarize the emission and air quality permitting requirements for animal/pet crematories.

EMISSION REQUIREMENTS

Animal/pet crematories are subject to the following Tennessee Air Quality rules:

- 1. Best Equipment and Technology for gaseous air contaminants [TAPCR 1200-03-06-.03(2)]
- 2. Visible emissions shall not exceed 20 percent opacity [TAPCR 1200-03-05-.01(1)]
- 3. Allowable particulate emissions shall not exceed 0.2 percent of the charging rate [TAPCR 1200-03-06-.02(3)(a)]

TAPCR 1200-03-06-.03(2) states:

Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

TAPCR 1200-03-05-.01(1) states:

...[N]o person shall cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of twenty (20) percent (6-minute average) except for one six-minute period per one (1) hour of not more than forty (40) percent opacity.

TAPCR 1200-03-06-.02(3)(a) states:

- (3) Incinerators
 - (a) The maximum allowable particulate emissions from incinerators is 0.200 percent of the charging rate for incinerators with a 2000 pound per hour charging rate or less......

Compliance with Best Equipment and Technology is generally achieved through the use of cleaner-burning fuels, including natural gas, propane, or diesel fuel. Compliance with the opacity and particulate standards can generally be met by properly operated and designed incinerators. (This usually entails a dual-chamber design with afterburner.) Compliance with the Best Equipment and Technology, opacity, and particulate matter standards for units that burn fuels other than natural gas, propane, or diesel fuel or are not a dual-chamber design with an afterburner are determined on a case-by-case basis.

Owners and operators of animal/pet crematories should follow the manufacturer's manual or any qualified document that provides adequate instruction to operate the unit. All recordkeeping and reporting requirements must still be met TAPCR 1200-03-10-.02(2)(a). With these items in mind, the Division has partnered with the Small Business Environmental Assistance Program to educate Animal/Pet Crematory owners and or operators on safety and good operating practices.

PERMITTING REQUIREMENTS

Regarding construction permits, paragraph TAPCR 1200-03-09-.01(1)(a) states:

Except as specifically exempted in Rule 1200-03-09-.04, no person shall begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source.

Regarding operating permits, paragraph TAPCR 1200-03-09-.02(1) states:

Any person planning to operate an air contaminant source constructed or modified in accordance with a construction permit issued by the Technical Secretary in rule 1200-03-09-.01 of this chapter shall apply for and receive an operating permit from the Technical Secretary after initial start-up of this said air contaminant source.

There are no specific exemptions for crematories (animal or human) in TAPCR 1200-03-09-.04, with the exception of small livestock incinerators that meet certain requirements¹. Therefore, crematories would be required to obtain a construction and/or operating permit unless they are exempt as an insignificant emissions unit under 1200-03-09-.04(4)(a) or exempt by having potential emissions less than the thresholds specified in 1200-03-09-.04(4)(d)2.

TAPCR 1200-03-09-.04(4)(a) states:

Any insignificant activity" or "insignificant emissions unit". In order to receive designation as an "insignificant activity" or "insignificant emissions unit", a written notification must be submitted to the Technical Secretary. The notification for designation shall include calculations and sufficient documentation to substantiate the applicant's claim. Upon receipt of the notification, the Technical Secretary will respond with a determination of agreement or disagreement with the applicant's claim. In issuance of determination as "insignificant", the Technical Secretary may base the determination upon any criteria that are relevant to the determination. For new sources, the request for designation must be made at least 30 days prior to the estimated starting date of construction. For new sources, if it is determined that the emissions unit does not qualify as an "insignificant emissions unit", the source must apply for a construction permit. The request for designation as an "insignificant emissions unit" may be made at any time for an existing source. In the absence of being designated as an "insignificant emissions unit" by the Technical Secretary under subparagraph 1200-03-09-.04 (4)(a) or in the absence of being exempt under subparagraphs 1200-03-09-.04 (4)(b) or 1200-03-09-.04 (4)(c), any emission unit or activity must have a valid construction and / or operating permit.

Insignificant Activity and Insignificant Emissions Unit are defined at TAPCR 1200-03-09-.04(2)(a)3: "Insignificant activity" or "insignificant emissions unit" means any activity or emissions unit at a stationary source for which the emissions unit or activity has a potential to emit less than 5 tons per year of each air contaminant and each regulated air pollutant that is not a hazardous air pollutant, and less than 1,000 pounds per year of each hazardous air pollutant.

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¹ 1200-03-09-.04(4)(d)11

TAPCR 1200-03-09-.04(4)(d)2 states:

Single stack of an air contaminant source that emits no hazardous air contaminants or pollutants, and which does not have the potential for emitting more than 0.50 pounds per hour of nonhazardous particulates and 0.5 pounds per hour of any regulated nonhazardous gas (particulates and gases not defined as hazardous air contaminants or pollutants), provided that the total potential particulate emissions from the air contaminant source amounts to less than two (2) pounds per hour, and the total regulated gaseous emissions from the air contaminant source amounts to less than two (2) pounds per hour. For the purpose of this part, an air contaminant source includes all sources located within a contiguous area, and under common control.

The Division of Air Pollution Control (DAPC) conducted a review from the Emission Summaries of active Animal/Pet Crematory permits for over the last five years. Based on this review, the average allowable emissions for any single criteria pollutant at these type of facilities is less than one ton per year. Animal/Pet Crematories are not a source of Hazardous Air Pollutants and are not regulated under any federal air quality regulation. Based on this review, DAPC believes most animal/pet crematories should qualify as an insignificant emissions unit; therefore, a construction or operating permits will not be required.

In order to qualify as an insignificant emissions unit under TAPCR 1200-03-09-.04(4)(a), any person planning on installing a pet/animal incinerator must submit a written notification as required under TAPCR 1200-03-09-.04(4)(a), including supporting documentation (i.e. completed application forms APC 100 and APC 103), to the Technical Secretary². Such information must demonstrate that potential emissions are less than 5 tons per year of each pollutant and less than 1000 pounds per year of HAP. If the unit is designed without a secondary or dual-chamber, the supporting documentation should also include representative emission test data (which can include manufacturers testing data for an incinerator of the same design, size, and charge rate as the proposed incinerator) that indicates compliance with 0.200 percent of the charging rate particulate matter limit. New sources must submit this information at least 30 days prior to installation of the incinerator.

The DAPC has partnered with the Small Business Environmental Assistance Program (SBEAP) to provide owners and operators of animal/pet crematories assistance in developing the insignificant emission unit notifications and supporting documentation. The DAPC will also work with SBEAP to provide outreach to existing animal/pet crematories.

There are approximately 54 animal/pet crematories that currently have air quality permits. These facilities may request insignificant emissions unit determinations by the following process:

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 $^{^{2}}$ Such information could also be used to determine if the incinerator is exempt from permitting under 1200-03-09-.04(4)(d)2.

- Make an insignificant request by submitting the supporting documentationstated within this guidance at any time prior to the deadline for submitting an application for renewal of their permit, or
- 2. Continue to comply with the current issued air quality permit as well as Best Equipment and Technology and wait to make an insignificant request, sixty (60) days prior to the expiration of the air quality permit by submitting the supporting documentation stated within this guidance.

When the DAPC sends out reminder letters regarding upcoming expiration of operating permits to animal/pet crematories it will include a paragraph that informs them of the option to become an insignificant source. It will also direct them to SBEAP for further assistance.

When a DAPC inspector conducts an inspection or complaint investigation at an animal/pet crematory, the inspector will discuss with the facility the forms (APC 100/103) that must be completed and submitted to the DAPC in order to determine if the operation is an insignificant emissions unit. The inspector will also direct them to SBEAP for technical assistance if they so desire. The inspector will track the process until the forms are submitted to the Nashville Central Office. This will be documented in the inspection/complaint report. If the animal/pet crematory is found to be in violation of a condition of an existing permit that goes beyond the requirements listed in Emission Requirements section of this guidance document, DAPC will provide the owner or operator of the crematory the option of 1) complying with the terms of the permit (including any enforcement action necessary) or 2) submitting an insignificant emissions unit determination as specified above. The inspector will document in the inspection report if the facility is complying with the visible emission standards. If there is a visible emission concern, the inspector will conduct a visible emission evaluation reading and will proceed with the appropriate enforcement action.

CONTINUING OBLIGATIONS AND REQUIREMENTS

If or when the animal/pet crematory has been determined to be an insignificant emissions unit and does not have a permit, the Best Equipment and Technology, visible emissions, and particulate matter emission limits continue to apply and may serve as the basis for enforcement if necessary.

Revision Number	Date	Brief Summary of Change
0	August 14, 2017	initial document