Air Quality Standard Permit for Animal Carcass Incinerators

Effective January 16, 2006

This standard permit authorizes animal carcass incinerators (pet crematories) that meet all of the conditions listed in the paragraphs below. This standard permit does not relieve the owner or operator from complying with any other applicable provision of the Texas Health and Safety Code, Texas Water Code, or rules of the Texas Commission on Environmental Quality (TCEQ).

(1) <u>Applicability</u>

This standard permit may be used to authorize animal carcass incinerators that meet the requirements of this standard permit.

- (2) Administrative Requirements
 - (A) Animal carcass incinerators must be registered in accordance with Title 30 Texas Administrative Code (30 TAC) § 116.611, Registration to Use a Standard Permit. Incinerators that meet the conditions of this standard permit do not have to meet 30 TAC § 116.610(a)(1), Applicability.
 - (B) Registrations must comply with 30 TAC § 116.614, Standard Permit Fees.
 - (C) No owner or operator of an animal carcass incinerator is permitted to begin construction and/or operation without obtaining written approval from the executive director. The time period in 30 TAC § 116.611(b) (i.e., 45 days) does not apply to facilities registering under this permit. Start of construction of any facility registered under this standard permit must comply with 30 TAC § 116.120, Voiding of Permits.
- (3) <u>Public Notice</u>
 - (A) For authorization to use this standard permit, an applicant must publish notice under this section not later than the 30th day after the date the executive director receives the registration.
 - (B) The public notice requirements in 30 TAC Chapter 39 Subchapters H, Applicability and General Provisions and K, Public Notice of Air Quality Applications do not apply.
 - (C) The applicant must publish notice at least once in a newspaper of general circulation in the municipality in which the incinerator is proposed to be located or in the municipality nearest to the proposed location of the incinerator. If the elementary or middle school nearest to the proposed incinerator is required to provide a bilingual education program as required by Texas Education Code, Chapter 29, Subchapter B, Bilingual Education and Special Language Programs and 19 TAC § 89.1205, Required Bilingual Education and English as a Second Language Programs, the applicant must also publish the notice at least once in an additional publication of general circulation in the municipality or county in which the incinerator is proposed to be located that is published primarily in the alternative languages in which the bilingual education program is or would have been taught and the notice must be in those languages. This requirement is waived if such a publication does not exist or if the publisher refuses to publish the notice.

- (D) The notice must include:
 - (i) a brief description of the proposed location and nature of the proposed incinerator;
 - (ii) a description, including a telephone number, of the manner in which the executive director may be contacted for further information;
 - (iii) a description, including a telephone number, of the manner in which the applicant may be contacted for further information;
 - (iv) the location and hours of operation of the commission's regional office at which a copy of the application is available for review and copying; and
 - (v) a brief description of the public comment process and the mailing address and deadline for filing written comments.
- (E) The public comment period begins on the first date notice is published under subsection (3)(A) of this standard permit and extends to 30 days from the publication date.
- (F) Not later than the 30th day after the end of the public comment period, the executive director will approve or deny the standard permit registration. The executive director must base the decision on whether the representations made in the registration meet the requirements of this standard permit. The executive director must consider all comments received during the public comment period in determining whether to approve the registration. If the executive director denies the registration, the executive director must state the reasons for the denial and any modifications to the registration necessary for the proposed incinerator to qualify for the standard permit.
- (G) The executive director will issue a written response to any public comments received related to the standard permit registration at the same time as or as soon as practicable after the executive director grants or denies the registration. Issuance of the response after the granting or denial of the registration does not affect the validity of the executive director's decision to grant or deny the registration. The executive director will:
 - (i) mail the response to each person who filed a comment; and
 - (ii) make the response available to the public.

(4) <u>General Requirements</u>

- (A) The permit holder shall comply with all applicable requirements under 30 TAC Chapter 330, Municipal Solid Waste.
- (B) A nameplate with the model and serial numbers must be on each incinerator in a visible location.
- (C) Incinerators must be located at least 50 feet from the nearest point on the property line. The maximum number of incinerators that may be authorized under standard permit depends on the distance from the property line to the nearest incinerator, but may not

exceed four incinerators. The property line limitations are outlined in the table below. In addition, the sum of the maximum burn rate capacity for all incinerators at a given location covered under this standard permit must not exceed 400 pounds per hour (lb/hr).

	Distance from the property line to the stack of the nearest incinerator							
	No less than 50 ft	No less than 100 ft	No less than 200 ft	No less than 300 ft				
Maximum number of incinerators	1	2	3	4				

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(D) Only incinerators that have a maximum burn rate greater than 100 lb/hr must comply with the requirements specified under section 8 of this standard permit.

(5) **Design Requirements**

- (A) Incinerators must be dual-chamber incinerators with a maximum burn rate capacity of 200 lb/hr.
- (B) The incinerators must be designed to maintain a minimum secondary chamber temperature of 1,600 degrees Fahrenheit with a minimum gas residence time of one-half second.
- (C) The owner or operator shall install and maintain equipment to continuously monitor and record secondary chamber temperature at the exit of the secondary chamber (measured at the base of the stack) whenever the incinerator is operating.
- (D) There must be no obstructions to stack flow, such as rain caps, unless such devices are designed to automatically open when the incinerators are operated. Properly installed and maintained spark arresters are not considered obstructions.
- (E) Incinerators must have a minimum stack height of 20 feet from ground level and the stack must be at least 3 feet above the highest point of the structure housing the incinerator.
- (6) **Operational Requirements**
 - (A) Incinerators must be used for the sole purpose of incineration of animal carcasses, in whole or part. The associated packaging material for the carcasses may also be incinerated, but must not be made of plastics that contain chlorine. Incinerators must not be used to incinerate any type of research or laboratory test animals. This standard permit does not authorize the incineration of any other types of waste.
 - (B) Incineration of a carcass must be initiated within two hours of receipt, unless stored at or below a temperature of 29 degrees Fahrenheit. Storage of carcasses shall be in a manner that minimizes the release of odors.
 - (C) Each load must be weighed by a scale. The batch load to the primary chamber must not exceed the manufacturer's specifications. The scale must be certified biennially to the most current National Institute of Standards and Technology Handbook 44 standards by an independent contractor (who is licensed by the Texas Department of Agriculture).

- (D) The manufacturer's recommended operating instructions must be posted at each incinerator and each incinerator must be operated in accordance with these instructions.
- (E) Fuel for the primary and secondary chamber burners is limited to natural gas or propane.
- (F) The exit temperature of the secondary chamber must not fall below 1,600 degrees Fahrenheit, averaged over a five minute period, while incinerating carcasses. For each operating period, the exit temperature of the secondary chamber must be at least 1,600 degrees Fahrenheit before the first charge of carcasses is loaded. The combustion of the last charge of carcasses for any operating period must be complete before the secondary chamber burners are shutdown.
- (G) Visible emissions must not exceed an opacity of 5.0% averaged over any six-minute period as determined by the United States Environmental Protection Agency Test Method 9.
- (H) Except in the case of incinerators with continuous opacity or carbon monoxide monitoring, or equivalent monitoring approved by the executive director or designated representative of the TCEQ, operation of the incinerator is limited to one-hour after sunrise to one-hour before sunset.
- (I) On-site handling of ash must be accomplished in a manner that will prevent the ash from becoming airborne. Ash from the incinerator must be stored in a closed container until transported and disposed of in accordance with 30 TAC Chapter 330.
- (J) Incinerators installed and operated in accordance with the requirements of this permit must meet the applicable requirements of 30 TAC § 111.121, Single-, Dual-, and Multiple-Chamber Incinerators; § 111.125, Testing Requirements; § 111.127, Monitoring and Recordkeeping Requirements; and § 111.129, Operating Requirements.

(7) <u>Recordkeeping Requirements</u>

- (A) All records required in this permit must be made available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction over the site. The following records must be kept at the plant for the life of the permit.
 - (i) A copy of the written approval of standard permit registration and subsequent renewal from the TCEQ.
 - (ii) All standard permit registrations and revised representations submitted to the TCEQ.
 - (iii) Stack sampling results or the results of any other air emissions testing conducted on the incinerator(s) authorized under this standard permit.
- (B) The following records must be maintained at the facility by the permit holder, in a form suitable for inspection, for a period of five years after collection and shall be made available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction over this site.

- (i) Records of the weight of carcasses loaded and cycle times to comply with section 6(C) of this standard permit.
- (ii) Records of the scale calibration to comply with section 6(C) of this standard

permit.

- (iii) Records of the secondary chamber temperature as required to comply with section 6(F) of this standard permit.
- (iv) Types of carcasses, date and time of receipt, date and time of incineration initiation and method of handling (i.e., frozen or immediate burn) to comply with section 6(A) and section 6(B) of this standard permit.
- (v) Operator's name, date and time of operation of the incinerator to comply with 6(H) of this standard permit.
- (vi) Dates and times of emergency incinerator shutdown and/or malfunction, including both the reason for the shutdown/malfunction (i.e., power outage, operator error, etc.) and a description of both corrective and preventative actions taken. This requirement is separate from those in 30 TAC Chapter 101, Subchapter F, Emissions Events and Scheduled Maintenance, Startup, and Shutdown Activities.
- (vii) All continuous emissions monitoring system (CEMS) data and quality-assurance data as required under section 8 of this standard permit, including calibration checks and adjustments and maintenance performed on these systems.

(8) Incinerators with a Maximum Burn Rate Greater than 100 lb/hr

- (A) The concentration of oxygen (O_2) at the exit of the incinerator must be maintained above 40,000 parts per million by volume on a wet basis (4 percent), averaged over a one-hour period.
- (B) The holder of this permit shall install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of O_2 from the exhaust stack.
 - (i) The CEMS must meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in Title 40 Code of Federal Regulations (40 CFR) Part 60, Appendix B, Performance Specification 3, Specifications and Test Procedures for O_2 and CO_2 Continuous Emission Monitoring Systems in Stationary Sources, or an acceptable alternative approved by the TCEQ Compliance Support Division.
 - (ii) The CEMS must be routinely checked and calibrated to ensure accurate readings. The holder of this permit shall assure that the CEMS meets the applicable qualityassurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determination, or an acceptable alternative approved by the TCEQ Compliance Support Division. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, § 5.2.3, Criteria for Excessive Audit Inaccuracy, any CEMS downtime and all cylinder gas audit

exceedances of ± 15 percent accuracy, must be reported quarterly to the appropriate TCEQ regional office, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ regional office.

- (iii) The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period.
- (C) Within 60 days of start-up, the CEMS specified in section 8(B) of this standard permit, must be certified for use in accordance with procedures outlined in 40 CFR Part 60, Appendix B, Performance Specification 3.
 - (i) The owner or operator shall contact the appropriate TCEQ regional office to schedule a pretest meeting as soon as certification testing is scheduled, but not less than 45 days prior to certification testing. The purpose of the precertification meeting is to review procedures, to provide the proper data forms for recording pertinent data, and to review the format for submitting the certification report.
 - (ii) The notification must include:
 - (1) the date for pre-certification meeting;
 - (2) the date certification testing will occur;
 - (3) the name of the firm conducting the CEMS certification testing;
 - (4) the type of equipment to be used; and
 - (5) the method or procedure to be used for certifying the O_2 and temperature CEMS.
 - (iii) Copies of the CEMS certification report must be submitted to the appropriate TCEQ regional office, any local air pollution control agency having jurisdiction over the site, and the TCEQ Compliance Support Division within 30 days after the testing is completed.