

Veterinary Support Services)	Departmental
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Turner, Maine)	Air Emission License
A-887-71-D-A)	Amendment #3

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Veterinary Support Services (VSS) of Turner, Maine was issued Air Emission License A-887-71-A-N on May 25, 2004 permitting the operation of three Class IV-A veterinary incinerators, to dispose of animal remains. This License was amended on October 29, 2004 and November 19, 2004 in order to add four other class IV-A incinerators.

VSS has requested an amendment to their License to add a new class IV-A incinerator to their License.

B. Emission Equipment

The new incinerator, designated Unit #8, has the following specifications:

Class Incinerator:	IV-A
Number of Chambers:	2
Type of Waste:	Type 4
Max. Design Charge:	100 lb/charge
Auxiliary Fuel Input:	
Primary Chamber	0.50 MMBtu/hr, LP Gas
Secondary Chamber	0.75 MMBtu/hr, LP Gas
Emissions Control:	Afterburner

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C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. This modification is determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005) of the Air Regulations.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined 06-096 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

A. Equipment Specifications

Operating temperature in the secondary chamber or refractory lined stack shall be maintained at or above 1600⁰F with a stack gas retention time, at or above 1600⁰F, of at least 1.0 second.

To ensure an efficient burn, and to prevent odors and visible emissions, the secondary chamber shall be preheated, as specified by the manufacturer, until the pyrometer measures a minimum of 1200⁰F prior to commencing the burn cycle.

Once the burn cycle has commenced by introduction of primary chamber combustion, the incinerator shall be operated in an efficient manner, and as specified by the manufacturer, for the period of time between preheat and reaching the set operational temperature to be a minimum of 1600⁰F in the secondary chamber.

The temperature in the secondary chamber and refractory lined stack as measured by the pyrometer shall be maintained at or above 1600⁰F for the duration of the burn cycle.

A pyrometer and ¼ inch test port shall be installed and maintained at the location of the incinerator or refractory lined stack, which provides sufficient volume to

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insure a flue gas retention time of not less than 1.0 second at a minimum of 1600⁰F.

A log will be maintained recording the weight of the waste charged, preheat time, charging time and the temperature of the secondary chamber every 60 minutes after start-up until, and including, final shutdown time. If a chart recorder is ever installed at this facility, the start time, date, and weight of waste charged may be logged on the chart.

A maximum particulate emission rate of 0.12 gr/dscf corrected to 12% CO₂ will be met.

Visible emissions from the incinerator shall not exceed 10% opacity based on a six (6) minute block average basis.

SO₂, NO_x, CO and VOC emission limits are based on AP-42 emission factors for the combustion of LP Gas.

The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management.

The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications and shall be familiar with the terms of the Air Emission License.

B. Annual Emission Limits

Incinerator Unit #8 is licensed for the following annual emissions, based on continuous operation:

Total Allowable Annual Emissions for the Facility
(used to calculate the annual fee)
Tons/Year

Unit	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Incinerator	2.70	2.70	0.01	0.82	0.11	0.03

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III. AIR QUALITY ANALYSIS

According to *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 of the Maine Bureau of Air Quality Regulations, the level of air quality analysis and monitoring are determined on a case-by-case basis. Based on analysis for similar sources, the size of the source, the allowable emissions, the location, and the stack height, ambient air quality standards including increments, are not expected to be violated, therefore an ambient air impact analysis will not be required for this source at this time.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this above source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-887-71-D-A, subject to the conditions found in Air Emission License A-887-71-A-N, and the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

- (1) The incinerator shall be used for the disposal of type 4 (veterinary) waste and shall not be used for the disposal of any plastics (other than plastic bags containing veterinary waste), cytotoxic (antineoplastic) drugs or any radioactive wastes and shall not be used to dispose of any medical waste classified as type 7 waste, as defined in 06-096 CMR 100. [06-096 CMR 115, BPT]
- (2) The incinerator shall not exceed the maximum design charge of 100 lbs per load. Auxiliary fuel input to the primary and secondary chamber shall be limited to LP Gas. Records from the supplier documenting the type of fuel delivered shall be kept for compliance purposes. [06-096 CMR 115, BPT]

- (3) A log shall be maintained recording the weight of waste charged, preheating time, charging time, afterburner temperature directly after charging and every 60 minutes after startup until, and including, final shutdown time, and time of final shutdown. For facilities operating a chart recorder, the start time, date, and weight of waste charged may be logged on the chart. [06-096 CMR 115, BPT]
- (4) The secondary chamber shall be preheated as specified by the manufacturer to a minimum of 1200⁰F prior to combusting any waste and shall be maintained at a minimum of 1600⁰F during the duration of the burn. [06-096 CMR 115, BPT]
- (5) Once the burn cycle has commenced by introduction of primary chamber combustion, the incinerator shall be operated in an efficient manner and as specified by the manufacturer for the period of time between preheat and reaching the set operational temperature to be a minimum of 1600⁰F in the secondary chamber. [06-096 CMR 115, BPT]
- (6) A pyrometer and ¼ inch test port shall be operated and maintained at that location of the incinerator or refractory lined stack which provides sufficient volume to insure a flue gas retention time of not less than 1.0 second at the minimum of 1600⁰F. [06-096 CMR 115, BPT]
- (7) VSS shall not exceed a particulate matter emission limit of 0.12 gr/dscf corrected to 12% CO₂. Therefore, based on the maximum design combustion rate and continuous operation of the Class IV-A incinerator, emissions shall be limited to the following: [06-096 CMR 115, 06-096 CMR 104, BPT]

<u>Pollutant</u>	<u>gr/dscf</u>	<u>lb/hr</u>
PM	0.12	0.62
PM ₁₀	-	0.62
SO ₂	-	Neg.
NO _x	-	0.19
CO	-	0.03
VOC	-	0.01

- (8) Visible emissions from the incinerator shall not exceed an opacity limit of 10% based on a six (6) minute block average basis. [06-096 CMR 101]

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- (9) The ash will be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]
- (10) The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications, and shall be familiar with the terms of this Air Emission License as it pertains to the operation of the incinerator. [06-096 CMR 115, BPT]
- (11) Though it is not being required now, the installation and operation of continuous chart recording devices may become necessary to document compliance with the temperature requirements of this license. Should the Bureau of Air Quality determine that continuous recording devices are necessary, the licensee shall, within 120 days, demonstrate that continuous recorders have been installed and are operational. [06-096 CMR 115, BPT]
- (12) VSS shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
 DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-887-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/19/2008

Date of application acceptance: 3/5/2008

Date filed with the Board of Environmental Protection: _____

This Order prepared by Jonathan Voisine, Bureau of Air Quality.