# Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590
Phone: 904/807-3300 ♦ Fax: 904/448-4366

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Secretary


*Sent by Electronic Mail – Received Receipt Requested*

**PERMITTEE**

University of Florida Animal Care Services
P.O. Box 100006
Gainesville, Florida 32610

Authorized Representative:
Mr. Michael Cormier, Director of Engineering

Air Permit No. 0010121-004-AC
Permit Expires: October 19, 2011
Plant Name: 1371 Building
Minor Source Air Construction Permit
Project Name: Construction After-the-Fact

This is the draft air construction permit, which authorizes construction after-the-fact for a Biological (Animal) Waste Incinerator. The proposed work will be conducted at the Animal Care Services (1371 Building), which is a Biological (animal) Waste Incinerator (Standard Industrial Classification No. 4953). The facility is located in Alachua County at 2292 SW 23rd Street (Westside), Gainesville, Alachua County, Florida. The UTM coordinates are Zone 17, 368.7km East, and 3279km North. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida

19 Oct 2010

Christopher L. Kirts, P.E.
Air Program Administrator

(Date)

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on October 19, 2010 to the persons listed below.

Michael Cormier, University of Florida (mcormier@ufl.edu)
Luis Lloren, AI Environmental Consulting Services, Inc. (ai@cfl.rr.com)
Douglas Bauman, General Environmental Engineering, Inc. (doug4ucfs@earthlink.net)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date,
pursuant to Section 120.52(7), Florida Statutes, with the
designated agency clerk, receipt of which is hereby acknowledged.

**19 Oct 2010**

(Clerk)

(Date)

## FACILITY AND PROJECT DESCRIPTION

Biological (Animal) Waste Incinerator.

| Facility ID No. 0010121 | |
|---|---|
| **ID No.** | **Emission Unit Description** |
| 001 | Biological (Animal) Waste Incinerator Model C1000S a multi-chamber animal cremation unit rated at 400 lbs/hour. |

## FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is not** a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

1. Permitting & Compliance Authority: The permitting authority for this project is the Northeast District Office, Florida Department of Environmental Protection (Department). The mailing address is 7825 Baymeadows Way, Suite B-200, Jacksonville, Florida 32256-7590. All documents related to applications for permits to operate an emissions unit shall be submitted to this District office.

2. Appendices: The following Appendices are attached as part of this permit:
   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions;
   c. Appendix C. Common Conditions; and
   d. Appendix D. Common Testing Requirements.

3. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

5. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

6. Application for Non Title V Air Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A completed **Application for Non Title V Air Permit** (DEP Form No. 62-210.900(3), F.A.C.), shall be submitted to the Department at least 60 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.

[Rule 62-4.090, F.A.C. and 62-4.055 and 62-4.220, F.A.C.]

This section of the permit addresses the following emissions unit.

| ID No. | Emission Unit Description |
|---|---|
| 001 | Biological (Animal) Waste Incinerator Model C1000S a multi-chamber animal cremation unit rated at 400 lbs/hour. |

The emissions unit is regulated under Rule 62-296.401(4), F.A.C. – Biological Wastes Incinerators

**EQUIPMENT**

1. **Equipment Name.** The permittee is authorized to construct an after-the-fact Biological (Animal) Waste Incinerator.

[Application No. 0010121-004-AC]

2. **Restricted Operation.** The hours of operation of are limited to 2000 hours per year).

[Rules 62-4.070(3); 62-210.200(PTE), F.A.C. and Application No. 0010121-004-AC]

**PERFORMANCE RESTRICTIONS**

3. **Permitted Capacity.** The maximum incineration rate shall not exceed 400 lb/hr without prior Department approval.

[Rule 62-210.200(PTE), F.A.C. and Application No. 0010121-004-AC]

**EMISSIONS STANDARDS**

4. **Visible Emissions.** Visible Emissions shall not exceed five percent (5%) opacity, six (6) minute average, except that visible emissions not exceeding fifteen percent (15%) opacity shall be allowed for up to six (6) minutes in any one (1) hour period.

[Rule 26-296.401(4)(b)1.a., F.A.C.]

5. **Particulate Matter**. Particulate matter emissions shall not exceed 0.100 grains per dry standard cubic foot of flue gas, corrected to 7% $O_2$.

[Rule 26-296.401(4)(b)2.a., F.A.C.]

6. **Hydrochloric Acid (HCl) Emissions**. Hydrochloric acid (HCl) emissions shall not exceed 4.0 pounds per hour.

[Rule 26-296.401(4)(b)2.b., F.A.C.]

7. **Carbon Monoxide Emissions (CO).** Carbon Monoxide emissions (CO) shall not exceed 100 parts per million by volume, dry basis, corrected to 7% $O_2$ on an hourly average basis.

[Rule 26-296.401(4)(b)5., F.A.C.]

8. **Incinerator design Temperature & Residence Time.** The unit shall operate with a combustion zone design temperature of no less than 1800 degrees Fahrenheit for at least a 1.0 second gas residence time in the secondary (or last) combustion chamber. The primary chamber and stack volumes shall not be utilized in calculating this residence time.

[Rule 62-296.401(4)(c)1., F.A.C.]

9. **Incinerator Air Lock and Loading Systems**. Mechanically fed facilities shall incorporate an air lock system to prevent opening the incinerator to the room environment. The volume of the loading system shall be designed to prevent overcharging thereby assuring complete combustion of the waste.

[Rule 62-296.401(4)(c)2., F.A.C.]

10. **Incineration**. Incineration or ignition of waste shall not begin until the secondary (or last) combustion chamber temperature requirement is attained. All air pollution control and continuous emission monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes is incinerated. The secondary (or last) combustion chamber temperature requirement shall be maintained until the wastes are completely combusted.

[Rule 62-296.401(4)(c)3., F.A.C.]

11. **Radioactive Waste**. The owner or operator is advised to contact the Department of Health regarding requirements that may apply to any proposed burning of radioactive waste.

[Rule 62-296.401(4)(c)4., F.A.C.]

12. **Hazardous Waste**. The owner or operator is advised to contact the Department's Division of Waste Management regarding requirements that may apply to any proposed burning of hazardous waste.

[Rule 62-296.401(4)(c)5., F.A.C.]

**TRAINING**

13. **Operator Training.** Each operator of the unit shall successfully complete a training program meeting the requirements of 40 CFR 60.53c(c) and the annual refresher training course requirements of 40 CFR 60.53c(f), adopted and incorporated by reference at Rule 62-204.800, F.A.C.

[Rule 62-296.401(4)(c)6., F.A.C.]

14. **Operator Training.** If the incinerator is modified to the extent that a Department construction permit is required, the operators shall be retrained to operate the modified incinerator.

[Rule 62-296.401(4)(c)6.a., F.A.C.]

**15.** **Operator Training.** An operator's training certificate must be kept on file at the facility for the duration of the operator's employment and for an additional two (2) years after termination of employment. The owner shall not allow the incinerator to be operated unless it is operated by an operator who has satisfactorily completed the required training program.
[Rule 62-296.401(4)(c)6.b., F.A.C.]

**TESTING REQUIREMENTS**

**16.** The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for Particulate Matter (PM), Hydrochloric Acid (HCl), Carbon Monoxide (CO), and Visual Emissions (VE). The initial tests shall be conducted **within 1 year of permit issuance**.

**17.** **Visible Emissions**. After the initial test the Facility must conducted test for visible emissions **annually thereafter**.

[Rule 62-296.401(4)(e)1.a., F.A.C.]

**18.** **Particulate Matter and Hydrochloric Acid Emissions**. After the initial test the Facility must conducted performance tests for particulate matter and hydrochloric acid **at renewal thereafter**.

[Rule 62-296.401(4)(e)1.b., F.A.C.]

**19.** **Test Methods**. Required tests shall be performed in accordance with the following reference methods.

| EPA Method | Description of Method and Comments |
|---|---|
| 1 | Determination used to select the sampling location and number of traverse points |
| 2 | Determination of Stack Gas Velocity and Volumetric Flow rate |
| 3 or 3a | Determination of gas analysis, including measurement of oxygen concentration. EPA Reference Method 3 or 3A shall be used simultaneously with each reference method of Stationary Sources. |
| 5 or 26A | Determination of Particulate Matter Emissions from Stationary Sources **(NOTE 1)** |
| 9 | Visual Determination of the Opacity of Emissions from Stationary Sources |
| 10 | Determination of Carbon Monoxide Emissions from Stationary Sources (The method shall be based on a continuous sampling train.) |
| 26 or 26a | Determination of Hydrochloric Acid Emissions from Stationary Sources. |

**(NOTE 1)** The minimum sample volume shall be thirty (30) dry standard cubic feet.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.310, F.A.C.; and Appendix A of 40 CFR 60]

**CONTINUOUS EMISSIONS MONITORING REQUIREMENTS**

**20.** **Continuous Emissions Monitoring Requirements**. Each owner or operator of a biological waste incinerator unit shall install, operate, and maintain, in accordance with the manufacturer's instructions, continuous emission monitoring equipment. The monitors shall record the secondary (or last) combustion chamber exit temperature operating parameter.

[Rule 62-296.401(4)(f)1.a., F.A.C.]

**RECORDKEEPING**

**21.** The owner or operator shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations; all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least two (2) years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.401(4)(f)2., F.A.C.]

**22.** **40 CFR 60, Subpart Ce**. This combustor **is not** subject to 40 CFR 60, Subpart Ce during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste (all defined in § 60.51c) is burned, provided the owner or operator of the combustor:

(1) Notifies the Administrator of an exemption claim; and

(2) Keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned.

[40 CFR 60.32e(b)]