Florida Department of
Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE:

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

Air Permit Number: 0010121-005-AO
Issue Date: September 20, 2011
Expiration Date: September 20, 2016

Authorized Representative:
Mr. Michael Cormier, Director of Engineering

Biological (Animal) Waste Incinerator
Non-Title V Air Operation Permit

PROJECT AND LOCATION

Project 005 is for the issuance of Permit No. 0010121-005-AO for the continued operation of a Biological (Animal) Waste Incinerator (EU 001) 1371 Building University of Florida.

The existing facility is a Biological (Animal) Waste Incinerator (Standard Industrial Classification No. 8071). 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.

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 operation 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 operate the facility in accordance with the conditions of this permit.

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.

9/20/2011

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

Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Notice 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 September 20, 2011 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.

(Clerk) 9/20/2011 (Date)

FACILITY AND PROJECT DESCRIPTION

The University of Florida operates a Biological (Animal) Waste Incinerator Model C 1000S (EU 001) Building 1371. The Biological (Animal) Waste Incinerator is a multi-chamber 1.5 mmbtu/hr. incineration unit that burns 100% pathological waste.

Combustion of waste in the multi-chamber unit occurs in two stages. In the first stage,

waste (which includes components of dead animals , tissues, organs and solid organic material used in research at the facility and, if applicable, the bags/containers and bedding used to collect and transport the animal waste); is fed into the primary combustion chamber, which is operated with less than the stoichiometric amount of air required for combustion. The low air-to-fuel ratio in the primary chamber dries and facilitates volatilization of the waste.

In the second stage, excess air is added to the volatile gases formed in the primary chamber to complete combustion. The Secondary chamber temperature has an emission exposure of 1.0 second at 1600 to 1850 ° F. The design also include: fully automatic PLC based controls, independent fuel/air systems, preheated combustion air, secondary chamber temperature monitor and recorder. The unit also ha s a primary burner temperature interlock , which prevents primary burner from firing prior to the secondary chamber reaching it's set point temperature of 1800 ° F. In addition the cremator is also equipped with UV continuous scanning flame detectors on burners, and an opacity sensor which can temporarily suspend operation of the primary chamber.

The air pollutant emissions from the facility are: Particulate matter (PM), Carbon Monoxide (CO) and Hydrochloric Acid (HCl).

This facility is considered a synthetic minor source due to restriction on hours of operation.

The facility consists of the following emissions units:

Facility ID No. 0010121	
ID No.	**Emission Unit Description**
001	Biological (Animal) Waste Incinerator

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.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Air Program, Florida Department of Environmental Protection (Department). The Northeast District's mailing address is 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256-7590. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the North East District Office. The mailing address and phone number of the District Office is: 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256. The Permitting Authority's telephone number is 904/256-1700.

3. 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;
   d. Appendix D. Common Testing Requirements

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the 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, 62-296 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.

5. 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.]

6. Modifications: 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.]

7. A completed **Application for Non Title V Air Permit Renewal** (DEP Form No. 62-210.900(4), F.A.C.), shall be submitted to the Department at least 60 days prior to the expiration date of this operation 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.] [Rules 62-4.055 and 62-4.220, F.A.C.]

The following specific conditions apply to the Emissions Unit listed below:

EU No.	Emission Unit Description
001	Biological (Animal) Waste Incinerator

EQUIPMENT

1. Equipment Name: The permittee is authorized to operate a Crawford Manufacturing Model C1000S a multi-chamber animal cremation biological Waste Incinerator that burns only 100% pathological waste.

[Permit No. 0010121-004-AC]

PERFORMANCE RESTRICTIONS

2. Restricted Operation: The hours of operation of are limited to 2000 hours per year and shall be recorded.

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

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

[Permit No. 0010121-004-AC]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Visible Emissions Limitation: 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. and Permit No. 0010121-004-AC]

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. and Permit No. 0010121-004-AC]

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. and Permit No. 0010121-004-AC]

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. and Permit No. 0010121-004-AC]

8. Incinerator design Temperature & Residence Time: The unit shall operate with a combustion zone 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. 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.]

11. 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

12. 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.]

13. 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.]

14. 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.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

15. Visible Emissions Compliance Test: A performance test shall be conducted for visible emissions prior to submitting the application for an initial air operation permit, and annually thereafter.

    [Rule 62-296.401(4)(e)1.a., F.A.C. and Air permit No. 0010121-004-AC]

16. Particulate Matter and Hydrochloric Acid EmissionsPerformance Test: Performance tests for particulate matter and hydrochloric acid shall be conducted prior to submitting the air operation permit renewal application.

    [Rule 62-296.401(4)(e)1.b., F.A.C. and Air permit No. 0010121-004-AC]

17. 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]

18. EPA Method 9- Required Sampling Time: The required minimum period of observation for each compliance test shall be thirty (30) minutes (five 6-minute averages). The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

    [Rule 62-297.310(4) (a) 2 F.A.C.]

CONTINUOUS EMISSIONS MONITORING REQUIREMENTS

19. 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

20. 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.]

21. 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) and Air Permit No. 0010121-004-AC]

NOTIFICATION, RECORDKEEPING AND REPORTING REQUIREMENTS

22. Compliance Test Notification: The permittee shall notify the air compliance section of this office in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

    [Rule 62-297.310(7)(a)9., F.A.C.]

23. Compliance Report: Reports of the required compliance tests shall be submitted as soon as practical but no later than 45 days after the last test is completed. Each test report shall include the maximum input / production rate at which this source was operated since the most recent test.

    [Rule 62-297.310(8)(b), F.A.C.]

24. Annual Operating Report (AOR): The facility is subject to Section 4. Appendix C- Common Conditions condition no. 10.b.(4)c., Annual Operating Report for Air Pollutant Emitting Facility.

    [Rule 62-210.370(3) F.A.C.]