AIR POLLUTION CONSTRUCTION PERMIT

PALM BEACH COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH AND ENGINEERING
P.O. Box 29 (901 Evernia Street)
West Palm Beach, Florida 33402-0029
Telephone: (561) 355-3070

ISSUED TO:

Permittee: Premier Funeral Services & Cremations, Inc. d/b/a/ Treasure Coast Crematory 730 North Dixie Highway Lake Worth, FL 33460 *Authorized Representative:* Gloria Rizzo, President	**ARMS No.:** 0990322 **Permit No:** 0990322-007-AC **Issued:** July 6, 2005 **Expires:** July 5, 2010

LOCATED AT:

Treasure Coast Crematory
730 North Dixie Highway
Lake Worth, FL 33460

UTM: Zone 17; 594.27 km E; 2945.63 km N

SIC No. 7261 - Human Crematory

STATEMENT OF BASIS:

The Palm Beach County Health Department (Health Department) issues this permit under the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4 through 62-297 the Florida Administrative Code (F.A.C.). The Florida Department of Environmental Protection (DEP) has permitting jurisdiction under Chapter 403.087, F.S. However, in accordance with Section 403.182, F.S., the DEP recognizes the Health Department as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that delegates to the Health Department the authority to issue or deny permits for this type of air pollution source located in Palm Beach County. The above named permittee is authorized to construct the equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Health Department.

ISSUED BY:

Executed in West Palm Beach, Florida.
PALM BEACH COUNTY HEALTH DEPARTMENT

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James E. Stormer , Q.E.P., Environmental Administrator
Air Pollution Control Section
Division of Environmental Health and Engineering

SECTION I. SUMMARY INFORMATION

PERMIT HISTORY

08-07-98: Health Department issued Construction Permit 0990322-003-AC for current location.
03-30-99: Health Department issued extension of Construction Permit 0990322-004-AC.
07-17-00: Health Department issued General Permit 0990322-005-AG.
04-18-02: Health Department issued General Permit 0990322-006-AG.
01-14-05: Health Department received construction permit application for the installation of two additional refurbished human cremation units.
02-08-05: Health Department issued request for additional information (RFI).
05-05-05: Health Department received additional information from E.J. LeBoss of Air Observations, Inc.
05-16-05: Health Department deemed application complete.

PERMIT CONTENT

Section I. - Summary Information
Section II. - Facility-Wide Specific Conditions
Section III. - Emission Unit Specific Conditions
Section IV. - Appendices
Appendix A: General Conditions
Appendix B: Definitions, Abbreviations, and Citation Format
Appendix C: Summary of General Compliance Test Requirements

REGULATORY CLASSIFICATION

This facility is classified as a natural, non-Title V, minor source of air pollution.

EMISSIONS UNITS SUMMARY

This permit addresses the following emissions unit:

EU NO.	EMISSIONS UNIT DESCRIPTION
001	Human crematory consisting of: • A Crawford Model No. C-1000H, two-chambered human cremation incinerator, and • A modified Crawford Model No. C-1000H, two-chambered human cremation incinerator, and • Two (2) two-chambered human cremation units refurbished to meet Crawford Model No. C-1000H specifications. Each unit is fired with natural gas or liquefied petroleum gas. The secondary combustion chamber temperature and exhaust gas oxygen content are recorded continuously during operation on a circular chart recorder.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

1.0 ADMINISTRATIVE

1.1 Regulating Agencies: All applications, reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department (Health Department) at P.O. Box 29 (901 Evernia Street), West Palm Beach, Florida, 33402-0029, and phone number (561) 355-33136. In addition, *copies* shall be submitted to the Air Program, Southeast District Office, Florida Department of Environmental Protection (DEP) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida, 33401. **[Specific Operating Agreement]**

1.2 General Conditions: The owner and operators shall be aware of, and operate under, the attached General Conditions listed in *Appendix A* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**

1.3 Citation Format: The format for citing applicable regulations is provided in *Appendix B* of this permit.

1.4 Application for Operation Permit: Within 60 days of establishing routine operation of the human cremation units, the permittee shall apply for an initial operation permit. The application shall include the Human Crematory General Permit Notification Form *[DEP Form No. 62-210.920(8)]*, the correct application fee, a visible emissions test report demonstrating compliance with the standards in this permit, and a summary of any changes or substitutions to equipment, processes, fuels, controls, etc., that vary from the original application. **[Rule 62-210.900, F.A.C.]**

(a) The permittee may continue to operate the emissions units in compliance with the conditions of this construction permit during the application process for an operation permit. **[Rule 62-4.030, F.A.C.]**

(b) The permittee must maintain a valid (not expired) air construction permit during the entire application process for an operation permit. This construction permit may be extended at the written request of the permittee prior to its expiration. **[Rule 62-4.080(3), F.A.C.]**

1.5 Applicable Regulations: This facility is subject to the following regulations: Chapters 62-4, 62-210, 62-212, 62-296, and 62-297, F.A.C., and specifically to *Rule 62-296.401(5), F.A.C., Emission Limiting Standards for Human Crematories*. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. **[Rule 62-210.300(1), F.A.C. and the SOA]**

2.0 EMISSION LIMITING AND PERFORMANCE STANDARDS

2.1 General VOC Standards: The owner or operator shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents without applying known and existing vapor emission control devices or systems. This includes: **[Rule 62-296.320(1), F.A.C.]**

- Regular inspection and maintenance of piping, valves, flanges, tanks, and containers used for storage and transfer of organic liquids in order to minimize fugitive VOC emissions.
- When not in use, directing solvent-containing materials to containers that prevent evaporation.

2.2 Objectionable Odors: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. **[Rule 62-296.320(2), F.A.C.]**

Note: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-210.200(203), F.A.C.]

2.3 General Visible Emissions Standard: Unless otherwise specified in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing emissions units, the opacity of which is equal to or greater than 20 percent. **[Rule 62-296.320(4)(b), F.A.C.]**

2.4 Unconfined Emissions of Particulate Matter: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading,

storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include the following: **[Rule 62-296.320(4)(c), F.A.C.]**

- Paving and maintenance of roads, parking areas and yards.
- Removal of particulate matter from roads and other paved areas under the control of the permittee to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.

Note: Facilities that cause frequent, valid complaints will be required by the Health Department to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular facility, the Health Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

3.0 OPERATION AND MAINTENANCE REQUIREMENTS

3.1 Circumvention: The owner or operator shall not circumvent air pollution control equipment/methods or allow the emission of air pollutants without the equipment/methods operating properly. **[Rule 62-210.650, F.A.C.]**

3.2 Excess Emissions Requirements

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Health Department for longer duration. **[Rule 62-210.700(1), F.A.C.]**

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction are prohibited. **[Rule 62-210.700(4), F.A.C.]**

(c) In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

4.0 COMPLIANCE MONITORING REQUIREMENTS

4.1 Duration: Unless otherwise specified, all records and reports required by this permit shall be kept for at least 3 years from the date the information was recorded. **[Rule 62-4.160(14)(b), F.A.C.]**

4.2 Temporary Test Facilities. The permittee may use permanent or temporary stack sampling facilities. If the permittee chooses to use temporary sampling facilities on an emissions unit, and the Health Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Health Department and remain on the emissions unit until the test is completed. Stack sampling specifications are summarized in *Appendix C* of this permit. **[Rule 62-297.310(6)(b), F.A.C.]**

4.3 Operational Rate During Testing: Unless otherwise stated in the applicable emission limiting standard for a rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. **[Rule 62-297.310(2), F.A.C.]**

4.4 Test Notification: The owner or operator shall notify the Health Department, in writing, at least ***15 days prior*** to the date on which each formal compliance test is to begin, of the test date, the expected test time, the

location of the test, the facility contact person responsible for coordinating the test, and the person or company conducting test. The 15 day notification requirement may be waived at the discretion of the Health Department. Likewise, if circumstances prevent testing during the test window specified for the emissions unit, the owner or operator may request an alternate test date ***before*** the expiration of this window. **[Rule 62-297.310(7)(a)9., F.A.C.]**

4.5 Special Compliance Tests**:** When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. **[Rule 62-297.310(7)(b), F.A.C.]**

5.0 REPORTS REQUIRED

5.1 Emission Compliance Stack Test Reports: For each required emissions compliance test, a report indicating the results of the test shall be filed with the Health Department as soon as practical, but no later than 45 days after the last sampling run is completed. The report shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Health Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310(8)(c), F.A.C.** and summarized in *Appendix C* of this permit. Additional report information may be specified for a given group of emissions units in this permit. **[Rule 62-297.310(8), F.A.C.]**

6.0 WASTE REQUIREMENTS

6.1 Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from securing any other types of required permits, licenses, or certifications.

SECTION III. A. EMISSIONS UNIT SPECIFIC CONDITIONS

GROUP A. This portion of the permit addresses the following regulated emissions unit and applies to each cremation unit:

EU NO.	EMISSIONS UNIT DESCRIPTION
001	Human crematory consisting of: • A Crawford Model No. C-1000H, two-chambered human cremation incinerator, and • A modified Crawford Model No. C-1000H, two-chambered human cremation incinerator, and • Two (2) two-chambered human cremation units refurbished to meet Crawford Model No. C-1000H specifications. Each unit is fired with natural gas or liquefied petroleum gas. The secondary combustion chamber temperature is recorded continuously during operation on a circular chart recorder.

1.0 AIR POLLUTION CONTROL EQUIPMENT AND METHODS

1.1 Secondary Chamber: Each cremation unit shall be designed with sufficient volume in the secondary chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800 degrees Fahrenheit. Primary chamber and stack shall not be used in calculating this residence time. **[Rule 62-296.401(5)(c), F.A.C.]**

1.2 Continuous Monitor: For each cremation unit, the permittee shall install, operate, calibrate, and maintain a continuous monitor to record the secondary combustion chamber temperature at the point or beyond where 1.0 second gas residence time is obtained in accordance with the manufacturer's instructions. **[Rule 62-296.401(5)(k), F.A.C.]**

2.0 EMISSION LIMITING STANDARDS

2.1 Visible Emissions: No visible emission (5 percent opacity), except that visible emissions not exceeding 20 percent opacity are allowed for up to three minutes in any one hour period. **[Rule 62-296.401(1)(a), F.A.C.]**

2.2 Odor: No objectionable odor allowed. **[Rule 62-296.401(1)(b), F.A.C.]**

2.3 Particulate Matter (PM): Emissions of particulate matter shall not exceed 0.080 grains per dry standard cubic foot of flue gas, corrected to 7% O_2. **[Rule 62-296.401(5)(a), F.A.C.]**

2.4 Carbon Monoxide (CO): Emissions of carbon monoxide shall not exceed 100 parts per million by volume, dry basis, corrected to 7% O_2 on an hourly average basis. **[Rule 62-296.401(5)(b), F.A.C.]**

3.0 PERFORMANCE STANDARDS

3.1 Hours of Operation: The hours of operation are unrestricted (8760 hours per year). **[Applicant's Request]**

3.2 Allowable Fuel: Primary and secondary burner fuel is limited to natural gas or LPG. **[Applicant's Request]**

3.3 Secondary Combustion Chamber Temperature: The actual operating temperature of the secondary chamber combustion zone shall be no less than 1600 degrees Fahrenheit throughout the combustion process in the primary chamber. Cremation in the primary chamber shall not begin unless the secondary chamber combustion zone temperature is equal to or greater than 1600 degrees Fahrenheit. **[Rule 62-296.401(5)(c), F.A.C.]**

3.4 Allowable Materials: Human crematories shall cremate only dead human bodies with appropriate containers. The bodies may be clothed. The containers may contain no more than 0.5 percent by weight chlorinated plastics as demonstrated by the manufacturer's data sheet. If containers are incinerated, documentation from the manufacturers certifying that they are composed of 0.5 percent or less by weight chlorinated plastics must be kept on-file at the site for the duration of their use and for at least two years after their use. This documentation must also be submitted with any application for an initial or renewal air operation permit or an air general permit notification form. No other material, including biomedical waste as defined in Rule 62-210.200, F.A.C., shall be incinerated. **[Rule 62-296.401(5)(e), F.A.C.]**

3.5 Training: All crematory operators shall be trained by the equipment manufacturer's representatives or another qualified organization. Only operators trained by a Department-approved training program shall be allowed to operate a human crematory. **[Rule 62-296.401(5)(f), F.A.C.]**

(a) The content of the training program shall be submitted to the Health Department for approval through the permitting process. The training shall provide a basic understanding of the principles of the combustion process, provide instruction on the operation and maintenance of the crematory unit, and increase awareness of regulatory requirements and safety concerns. Training programs shall be a minimum of 8 hours of instruction. Training programs shall at a minimum include hands-on experience involving startup, operation of at least one cremation, shutdown of the equipment, and one full cycle of preventive maintenance actions. The Health Department shall approve training programs which meet, at a minimum the criteria applicable to cremation set forth in the EPA Medical Waste Incinerator Operator Training Program Course Handbook, EPA 453/B-93-018, and Instructor's Guide, EPA 453/B-93-019.

(b) A copy of the training certificate for each operator having satisfactorily completed the Department-approved training program must be submitted to the Health Department within 15 days of training. The owner of any new or modified crematory unit shall submit copies of the operator training certificates within 15 days after completion of the initial compliance test pursuant to the unit's air construction permit. If a crematory unit is modified to the extent that an air construction permit is required, the operators shall be retrained to operate the modified unit.

(c) An operator's certificate must be kept on file at the facility for the duration of the operator's employment and for an additional two years after termination of employment.

4.0 COMPLIANCE MONITORING REQUIREMENTS

4.1 Continuous Monitor Records: A complete file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; and adjustments, preventive maintenance, and corrective maintenance performed on these systems or devices, shall be recorded in a permanent legible form available for inspection. Continuous temperature monitoring documentation shall include operator name, operator indication of when cremation in the primary chamber begins, date, time, and temperature markings. The file shall be retained for at least two years following the recording of such measurements, maintenance, reports, and records. **[Rule 62-296.401(5)(k), F.A.C.]**

4.2 Test Methods and Procedures: Compliance with the applicable emissions limiting standards of this permit shall be demonstrated in accordance with the following methods and procedures.

(a) *Visible Emissions (VE)*: The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. **[Rules 62-296.401(1)(c)1. and Rule 62-296.401(5)(g)1., F.A.C.]**

(b) *Carbon Monoxide (CO)*: The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. **[Rule 62-296.401(5)(g)2., F.A.C.]**

(c) *Oxygen*: The test method for oxygen shall be EPA Method 3, incorporated and adopted by reference in Chapter 62-297, F.A.C. **[Rule 62-296.401(5)(g)3., F.A.C.]**

(d) *Particulate Matter (PM)*: The test method for particulate emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. **[Rule 62-296.401(5)(g)4., F.A.C.]**

(e) *Operation During Compliance Test*: Testing of emissions shall be conducted with the cremation unit operating at the manufacturer's recommended capacity. **[Rule 62-296.401(5)(h), F.A.C.]**

4.3 Frequency of Testing: For each human cremation unit, the permittee shall demonstrate compliance with all applicable standards within 30 days of establishing routine operations. Thereafter, the permittee shall demonstrate compliance with the visible emissions standards annually and with all other remaining applicable standards prior to renewal of the operation permit. **[Rule 62-296.401(5)(i), F.A.C.]**

4.4 Identical Unit Tests: The permittee may demonstrate compliance with the *carbon monoxide* and *particulate* emissions standards by submission of a test report for an identical (same make, model, and capacity) cremation unit operating in compliance with a valid DEP air permit and tested pursuant to that permit. The test data in the test report must be less than five years old and need not be obtained from the unit that is being permitted. **[Rule 62-296.401(5)(j), F.A.C.]**

5.0 REPORTS REQUIRED

5.1 Test Reports: In addition to the applicable information listed in **Rule 62-297.310(8)(c), F.A.C.** and summarized in *Appendix C* of this permit, the compliance test reports shall include the secondary chamber temperature chart record indicating: start time of cremation cycle and test; secondary chamber temperature; operator's name; and finish time of test and cremation cycle. **[F.A.C. 62-297.310(8)]**