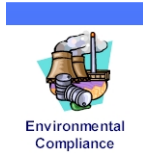




**HUMAN CREMATORY**

**COMPLIANCE INSPECTION CHECKLIST**



**INSPECTION TYPE:** ANNUAL (INS1, INS2)  COMPLAINT/DISCOVERY (CI)   
RE-INSPECTION (FUI)  ARMS COMPLAINT NO: \_\_\_\_\_

**AIRS ID#:** 1030473 001 **DATE:** 10/25/07

**FACILITY NAME:** Lighthouse Funeral Services, LLC

**FACILITY LOCATION:** 12660 34th Street North #A-2  
Clearwater, FL

**RESPONSIBLE OFFICIAL:** John Eric Kuge? **PHONE:** 727-571-1726

**CONTACT NAME:** John Eric Kuge? **PHONE:** 727-571-1726

**REMITTANCE YEAR:** \_\_\_\_\_ **ENTITLEMENT PERIOD:** \_\_\_\_\_ / 11/3/12  
(effective date) (end date)

**PART I: INSPECTION COMPLIANCE STATUS** (check  only one box)

IN COMPLIANCE  MINOR Non-COMPLIANCE  SIGNIFICANT Non-COMPLIANCE

**PART II: TESTING/RECORDKEEPING REQUIREMENTS – Rule 62-296.401, F.A.C.**

(check  appropriate box(es))

- 1. Were there any objectionable odor(s) detected?-----  Yes  No
- 2. Was a visible emissions test conducted during this site visit according to EPA Method 9 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
- 3. In order to demonstrate individual source compliance, was an annual visible emissions test conducted 60 days prior to the AGP Notification form submission, and within 60 days prior to each anniversary date? (Rule 62-296.401(5)(i), F.A.C.)-----  Yes  No
- 4. In order to demonstrate individual source compliance were the remaining applicable standards testing completed within 60 days prior to the AGP Notification form submission? (Rule 62-210.300(4), F.A.C.)  Yes  No
  - a) Carbon Monoxide (CO) emissions equal to or below the requirements of 100 parts per million by volume, dry basis, corrected to 7% O<sub>2</sub> on an hourly average basis and tested according to EPA Method 10 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
  - b) Oxygen test performed according to EPA Method 3 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
  - c) Particulate matter emissions test with results equal to or below the requirements of 0.080 grains per dry standard cubic foot (ft<sup>3</sup>) of flue gas, corrected to 7% O<sub>2</sub> and tested according to EPA Method 5 (Ref.: Chapter.62-297, F.A.C.)?-----  Yes  No
- 5. Was all emissions testing conducted with the source operating at the manufacturers recommended capacity?-----  Yes  No
- 6. Was CO & PM compliance demonstrated by submission of a test report for an identical crematory unit?  Yes  No
- 7. Was the Department notified at least 15 days prior to the date of the last formal compliance test?-----  Yes  No
- 8. Was the required test report filed with the Department as soon as practical, but no longer than 45 days after the test was completed?-----  Yes  No

**PART III: OPERATING/RECORDKEEPING REQUIREMENTS – Rule 62-296.401, F.A.C.**

(check  appropriate box(es))

1. Is there **Continuous Emissions Monitoring System (CEMS)** equipment installed on each unit to record temperatures in the primary and secondary chambers where there is a 1.0 second gas residence time in the secondary chamber combustion zone in accordance with the manufacturer's instructions?-----  Yes  No
- a) Do temperature probes seem to be properly placed?-----  Yes  No
- b) Are the following records kept on file, available for inspection for at least two years following the recording of such measurements, maintenance, reports and records?
- 1) All measurements (including CEMS)-----  Yes  No
- 2) Monitoring device-----  Yes  No
- 3) Performance Testing Measurements -----  Yes  No
- 4) CEMS Performance Evaluation-----  Yes  No
- 5) All CEMS or monitoring device calibration checks-----  Yes  No
- 6) Adjustments-----  Yes  No
- 7) Preventive maintenance performed on systems/devices-----  Yes  No
- 8) Corrective maintenance performed on systems/devices-----  Yes  No
2. Was this crematory unit constructed: (check only one  box)
- a)  **BEFORE** August 30, 1989? (If this box checked, continue on to #3 and skip #4)
- b)  **ON** or **AFTER** August 30, 1989? (If this box checked, skip #3 and continue on to #4)
3. If constructed **BEFORE** August 30, 1989 is the:
- a) secondary chamber combustion zone providing at least a 1.0 second gas residence time @ **1600°F**?  Yes  No
- b) actual operating temperature of the secondary chamber combustion zone no less than **1400°F** throughout the combustion process in the primary chamber?-----  Yes  No
- c) cremation in the primary chamber begun after the secondary chamber combustion zone temperature is equal to or greater than **1400°F**?-----  Yes  No
- d) required monitoring equipment installed and operational, and providing continuous monitoring to record the temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary chamber combustion zone according to the manufacturer's instructions?-----  Yes  No
4. If constructed **ON** or **AFTER** August 30, 1989 is the:
- a) volume in the secondary combustion zone sufficient to provide at least a 1.0 second gas residence time @ **1800° F**?-----  Yes  No
- b) the actual operating temperature of the secondary chamber combustion zone no less than **1600°F** throughout the combustion process in the primary chamber?-----  Yes  No
- c) secondary chamber combustion zone temperature equal to or greater than **1600°F** before the cremation process begins in the primary chamber?-----  Yes  No
5. Are appropriate cremation containers containing no more than 0.5 % (percent) by weight chlorinated plastics used during the cremation of dead human bodies?-----  Yes  No
- a) If the answer to question 4 above is YES, is certifying documentation from the manufacturer that they are composed of 0.5% or less by weight chlorinated plastics kept on file at the site for the duration of their use and for at least two years after their use?-----  Yes  No
- b) Are there any other materials, including biomedical wastes (Rule 62-210.200, FAC) incinerated at this location?-----  Yes  No
6. Have all crematory operators been trained and certified by a Department-approved training program?  Yes  No
- a) Are copies of the training certificates for all crematory operators kept on file at the facility for the duration of the operator's employment & for an additional two years after termination of employment?-----  Yes  No

**PART IV: SPECIAL CONDITIONS AND PROCEDURES – Rule 62-296.401, F.A.C.**

**A. New or Modified Process Equipment**

1. Since the last inspection has there been
  - a) installation of any new process equipment?-----  Yes  No
  - b) alterations to existing process equipment without replacement?-----  Yes  No
  - c) replacement of existing equipment substantially different than that noted on the most recent notification form?-----  Yes  No
  - d) If you answered **YES** to any of the above, did the owner submit a new and complete notification form and appropriate fee (Rule 62-4.050, F.A.C.) to the appropriate DEP or local program office?-----  Yes  No
2. If a crematory unit has been modified to the extent that a Department air construction permit was required, have all operators been retrained to operate the modified unit?-----  Yes  No
3. In the case of new or modified equipment, where a Department air construction permit was required, has the owner submitted copies of all operator training certificates?-----  Yes  No
  - a) submitted within the 15 day required window following the training?-----  Yes  No

Adam Richardson

\_\_\_\_\_  
Inspector's Name (Please Print)

10/25/07  
Date of Inspection

\_\_\_\_\_  
Inspector's Signature

10/25/08  
Approximate Date of Next Inspection

**COMMENTS:** See the attached Pinellas County inspection report form for additional information



## Human Crematory

<b>FACILITY:</b> <b>Lighthouse Funeral Services, LLC</b>		<b>PERMIT ID:</b> <b>1730</b>
<b>Palm State Crematory Services</b>		<b>DISTRICT:</b> Southwest
<b>ADDRESS:</b> 12660 34th Street North #A-2 Clearwater, FL		<b>CONTACT PHONE:</b> 727-571-1726
<b>ARMS NO:</b> <b>1030473 001</b>	<b>PERMIT NO:</b> <b>1030473-007-AG</b>	<b>Expiration Date:</b> 11/3/12 <b>Renewal Date:</b> 10/3/12 <b>Test Date:</b> 10/18/00

**EMISSION UNIT DESCRIPTION:** Human Crematory: B&L Cremation Systems, Model N-20 150 lb/hour (350 lb Batch). Required to operate at 1600 degrees.

<b>INSPECTION DATE:</b> 10/25/07	<b>ARMS INSPECTION TYPE:</b> <input checked="" type="checkbox"/> INS2 or <input type="checkbox"/> INS_____	<b>COMPLIANCE STATUS:</b> <input checked="" type="checkbox"/> IN <input type="checkbox"/> MNC <input type="checkbox"/> SNC
Type of Inspection: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Re-inspection <input type="checkbox"/> Complaint <input type="checkbox"/> Drive-by <input type="checkbox"/> Quarterly		
<b>A. General Review:</b>		

1.	Permit File Review	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2.	Introduction and Entry _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3.	<p>Administrative Corrections. Within thirty (30) days of any minor changes requiring corrections to information contained in the registration form, the owner or operator shall notify the Department in writing. Such changes shall include:</p> <p>1. Any change in the name, address, or phone number of the facility or authorized representative <b>not</b> associated with a change in ownership or with a physical relocation of the facility or any emissions units or operations comprising the facility; or</p> <p>2. Any other similar minor administrative change at the facility.</p> <p><b>Is the Authorized Representative still: <u>John Eric Kuge</u>?</b></p> <p><b>Is the facility contact still: John Eric Kuge?</b> [62-210.310(2)(d), F.A.C.]</p> <p><i>Comments:</i></p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

I N C	M N C	S N C	
<b>B. Specific Conditions</b>			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Visible emissions</b> - 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 62-296.401(5)(b)1, F.A.C.]</p> <p><i>Comments: The last annual visible emissions test, conducted on 10/18/07 demonstrated an opacity of 0%. An AQD VE test was performed during this site visit <input type="checkbox"/>Yes or <input checked="" type="checkbox"/>No.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Operating Temperature</b> - Human crematory units shall operate with a secondary chamber temperature of no less than :  <input type="checkbox"/> 1600 degrees Fahrenheit throughout the combustion process in the primary chamber, for construction applications received by the Department on or after August 30, 1989. 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.], or  <input type="checkbox"/> 1400 degrees Fahrenheit throughout the combustion process in the primary, for construction applications received by the Department prior to August 30, 1989. Cremation in the primary chamber shall not begin unless the secondary chamber combustion zone temperature is equal to or greater than 1400 degrees Fahrenheit. [Rule 62-296.401(5)(c), F.A.C.]</p> <p><i>Comments: Facility is required to operate at a temperature of 1600° F based on <input type="checkbox"/> identical stack testing, <input type="checkbox"/> source specific stack testing and visible emissions tests, or <input checked="" type="checkbox"/> rule. Based on record reviews, the lowest operating temperature</i></p>

## Human Crematory

I N C	M N C	S N C	<b>B. Specific Conditions</b>
			<i>observed was 1600° F.</i>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Allowed Materials</b> - Human crematory units shall cremate only human or fetal remains with appropriate containers. The remains may be clothed. The containers shall 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 manufacturer certifying that they are composed of 0.5 percent or less by weight chlorinated plastics shall be kept on-file at the site for the duration of their use and for at least two (2) years after their use. No other material, including biomedical waste as defined in Rule 62-210.200, F.A.C., shall be incinerated. [Rule 62-296.401(5)(d), F.A.C.]</p> <p><i>Comments: Reviewed records for the months of 01/07 to 10/07. Supporting documentation was verified ( <input checked="" type="checkbox"/> Yes or <input type="checkbox"/> No)</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Equipment Maintenance</b> -All human crematory units shall be maintained in proper working order in accordance with the manufacturer's specifications to ensure the integrity and efficiency of the equipment. If a crematory unit contains a defect that affects the integrity or efficiency of the unit, the unit shall be taken out of service. No person shall use or permit the use of that unit until it has been repaired or adjusted. Repair records on all crematory units shall be maintained onsite for at least two years. A written plan with operating procedures for startup, shutdown and malfunction of each crematory unit shall be maintained and followed during those events. Each unit's burners shall be operated with a proper air-to-fuel ratio. If the unit so allows, the burners' flame characteristics shall be visually checked at least once during each operating shift and adjusted when warranted by the visual checks. [Rule 62-296.401(5)(e), F.A.C.]</p> <p><i>Comments: The facility ( <input checked="" type="checkbox"/> does/ <input type="checkbox"/> does not) have a written plan for operating procedures for startup, shutdown and malfunction. Repair records were reviewed for the months of 01/07 to 10/07. The records were available and maintained on site. The crematory unit ( <input checked="" type="checkbox"/> does/ <input type="checkbox"/> does not) allow, the burners' flame characteristics shall be visually checked. The flame ( <input checked="" type="checkbox"/> was/ <input type="checkbox"/> was not/ <input type="checkbox"/> NA) observed during each shift.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Frequency of Testing.</b></p> <ol style="list-style-type: none"> <li>1. The owner or operator of any human crematory unit using an air general permit shall have a performance test conducted for visible emissions no later than thirty (30) days after the unit commences operation, and annually thereafter.</li> <li>2. The owner or operator of any human crematory unit operating under the authority of an air construction permit or air operation permit shall have a performance test conducted for visible emissions prior to submitting the application for an initial air operation permit, and annually thereafter.</li> <li>3. The owner or operator of any human crematory unit shall not be required to have performance tests conducted for carbon monoxide and particulate matter, except as provided at paragraph 62-297.310(7)(b), F.A.C. [Rule 62-296.401(5)(h), F.A.C.]</li> </ol> <p><i>Comments: The last test was conducted on 10/18/07.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Test Notification</b> - The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [62-297.310(7)(a)9, F.A.C.]</p> <p><i>Comments: The County was notified at least 15 days prior to the compliance test.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Test Reports</b> - The required test report shall be filed with the PCDEM as soon as practical but no later than 45 days after the test is completed. [62-297.310(8), F.A.C.]</p> <p><i>Comments: The last test was conducted on 10/18/07, and the test results were submitted on 10/31/07..</i></p>

## Human Crematory

I N C	M N C	S N C	<b>B. Specific Conditions</b>
			<p>This( <input checked="" type="checkbox"/>is / <input type="checkbox"/>is not) within the allowable 45 day window.</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Continuous Monitoring Requirements-</b> Each crematory unit shall be equipped and operated with a continuous monitor to record temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary chamber combustion zone in accordance with the manufacturer's instructions. In addition, each crematory unit installed after February 1, 2007, shall be equipped and operated with a pollutant monitoring system to automatically control combustion based on continuous in-stack opacity measurement. Such system shall be calibrated to restrict combustion in the primary chamber whenever any opacity exceeding 15% opacity is occurring. A complete file of all temperature measurements; all continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; and all 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 was begun, date, time, and temperature markings. Pollutant monitoring system documentation shall include indication of when the opacity measurement system was cleaned and checked for proper operation in accordance with the manufacturer's recommended maintenance schedule. The file shall be retained for at least two (2) years following the recording of such measurements, maintenance, reports, and records. [Rule 62-296.401(5)(i), F.A.C.]</p> <p><i>Comments: Reviewed temperature charts for the months of 01/07 to 10/07. The temperature probe appears properly placed ( <input checked="" type="checkbox"/> Yes or <input type="checkbox"/> No).</i>  <i>This facility ( <input type="checkbox"/> was/ <input checked="" type="checkbox"/> was no)t installed after February 1, 2007, therefore ( <input type="checkbox"/> must/ <input checked="" type="checkbox"/> does no)t have to be equipped and operated with a pollutant monitoring system to automatically control combustion based on continuous in-stack opacity measurement.</i>  <i>The system( <input checked="" type="checkbox"/> is/ <input type="checkbox"/> is not/ <input type="checkbox"/> NA) calibrated to restrict combustion in the primary chamber whenever any opacity exceeding 15% opacity is occurring.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Process Rate</b></p> <p><i>Comments: The maximum load for this crematory unit is 350 pounds.</i></p>
I N C	M N C	S N C	<b>C. Selected General Conditions and Procedures</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Periods of Noncompliance</b> - If, for any reason, the owner or operator of any facility operating under an air general permit pursuant to Rule 62-210.300(4)(a), F.A.C., does not comply with or will be unable to comply with any condition or limitation of the permit, the permittee shall immediately provide the Department with the following information:</p> <ol style="list-style-type: none"> <li>1. A description of and cause of noncompliance; and</li> <li>2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result.</li> </ol> <p>[62-210.310(3)(i), F.A.C.]</p> <p><i>Comments: The facility is aware of the requirements of this permit condition.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Valid Permit</b></p> <p>To avoid lapse of authority to operate, an owner or operator intending to use, or continue to use, an air general permit must submit the proper registration form and processing fee at least thirty (30) days prior to expiration of the facility's existing air operation permit or air general permit.</p> <p>[62-210.310(2)(c)2., F.A.C.]</p> <p><i>Comments: The permit expires on 11/3/12. A new notification form is required to be submitted no later than 10/3/12.</i></p>

## Human Crematory

I N	M N C	S N C	C. Selected General Conditions and Procedures
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>Equipment Changes</b> - The owner or operator shall maintain records of all equipment changes. In the case of installation of new process or air pollution control equipment, alteration of existing process or control equipment without replacement, or replacement of existing process or control equipment with equipment substantially different in terms of capacity, method of operation, material processed, or intended use than that noted on the most recent registration form, the owner or operator shall submit a new and complete air general permit registration form for the facility with the appropriate fee pursuant to Rule 62-4.050, F.A.C. to the Department, provided, however, that any change that would constitute a new major stationary source, major modification, or modification that would be a major modification but for the provisions of paragraph 62-212.400(2)(a), F.A.C., shall require authorization by air construction permit. [62-210.310(2)(e)., F.A.C.]</p> <p><i>Comments: There have not been any equipment changes.</i></p>
<b>D. Other:</b>			
Closing Conference			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Inspector(s):</b> Adam Richardson, Pinellas County, Air Quality Division			
<b>Signature(s)</b>			Date: 10/31/07

CONTACT LOG? \_\_\_\_\_, ACCESS?   X  , ARMs?   X