



# HUMAN CREMATORY



## COMPLIANCE INSPECTION CHECKLIST

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

<b>AIRS ID#:</b> 0112146	<b>DATE:</b> <u>2/8/11</u>	<b>ARRIVE:</b> <u>130</u>	<b>DEPART:</b> <u>330</u>
<b>FACILITY NAME:</b> ATLANTIC BURIAL CASKET CO. DBA ABCO			
<b>FACILITY LOCATION:</b> 820 N.W. 57TH STREET FT. LAUDERDALE 33309			
<b>OWNER/AUTHORIZED REPRESENTATIVE:</b> THOMAS RALPH Email: www.abco.cc		<b>PHONE:</b> (954)587-6888 <b>Mobile:</b>	
<b>CONTACT NAME:</b> CHRIS RALPH Email: chris.ralph@kimley-horn.com		<b>PHONE:</b> (772)794-4088 <b>Mobile:</b>	
<b>ENTITLEMENT PERIOD:</b> 11/27/2006 / 11/27/2011 (effective date) (end date)			

### Facility Section

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

IN COMPLIANCE     MINOR Non-COMPLIANCE     SIGNIFICANT Non-COMPLIANCE

**PART II: ONSITE INTRODUCTORY MEETING** (check  only one box for each question)

1. Name(s) of facility representative(s): Owne Day  
Brief Notes: \_\_\_\_\_

2. Is the Authorized Representative still THOMAS RALPH? -----  Yes    ..No  
If no, who is?: \_\_\_\_\_  
If different, did the facility provide an administrative update within 30 days? -----  Yes    ..No

3. Is the facility contact still CHRIS RALPH? -----  Yes    ..No  
If no, who is?: \_\_\_\_\_

4. Will facility be conducting VE test(s) during today's inspection? -----  Yes    ..No  
If yes, was the compliance authority notified at least 15 days in advance? -----  Yes    ..No

**Emissions Unit Section**  
**1 – ONE UNIT INDUSTRIAL EQUIPMENT MODEL#IE 43-PPII**

**PART I: FILE REVIEW PRIOR TO INSPECTION**

(check  only one box for each question)

1. a. Complete AC application or, if no AC permit, initial GP registration received on or after August 30, 1989? -----  Yes ..No
- b. If yes, were design calculations provided then to confirm a sufficient volume in the secondary chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800 degrees Fahrenheit? -----  Yes ..No
2. Crematory unit installed after February 1, 2007? -----  Yes ..No
3. Date of last inspection: 7/9/10
4. Past Visible Emissions (VE) tests:
  - a. Was a VE test performed within each of the past 4 calendar years? -----  Yes ..No
  - b. Has a VE test been performed yet within the current calendar year? -----  Yes ..No
  - c. If first year of operation, was a VE test performed within 30 days of commencing operation? -----  N/A  Yes ..No
  - d. Date of last VE test: 2/18/10
  - e. Was the VE test report filed with the compliance authority no later than 45 days after the test? -----  Yes ..No
  - f. Did the facility demonstrate compliance during the last VE test? -----  Yes ..No  
If no, what was the problem (if known)?

**PART II: VISIBLE EMISSIONS TESTING**

(check  only one box for each question)

1. **Was a visible emissions test conducted by the facility for this unit during this site visit?** -----  Yes ..No
  - a. Was the test conducted with the unit operating at a capacity of one adult-sized cadaver? -----  Yes ..No
  - b. Was the visible emissions test conducted according to EPA Method 9? -----  Yes ..No
  - c. The visible emission test resulted in an opacity of \_\_\_\_\_ % for the highest six minute average.
  - d. Did the visible emission test demonstrate compliance with the limit? -----  Yes ..No  
(5% opacity, six-minute average, except that visible emissions not exceeding 15% opacity shall be allowed for up to six minutes in any one-hour)
2. **Was a visible emissions test conducted by the inspector during this site visit?** -----  Yes ..No
  - a. Was the test conducted with the unit operating at a capacity of one (1) adult-sized cadaver? -----  Yes ..No
  - b. Was the visible emissions test conducted according to EPA Method 9? -----  Yes ..No
  - c. The visible emission test resulted in an opacity of \_\_\_\_\_ % for the highest six minute average.
  - d. Did the visible emission test demonstrate compliance with the limit? -----  Yes ..No
3. **Is there any reason to ask for a special test to determine compliance with the PM and CO standards?** -----  Yes ..No  
If yes, what reason?

**PART III: MONITORING/RECORDKEEPING REQUIREMENTS**

(check  only one box for each question)

1. **Were there any objectionable odors detected?** -----  Yes ..No  
An upwind/downwind survey of the facility was conducted. The observed parameters were:  
Downwind odor level detected- \_\_\_\_\_ Wind direction - \_\_\_\_\_ Upwind odor level detected- \_\_\_\_\_ (1-10)
2. **Continuous Monitoring Systems –**
  - a. Is a continuous temperature monitoring system installed on each unit to record temperatures in the secondary chamber in accordance with the manufacturer's instructions? -----  Yes ..No
  - b. Is the temperature probe properly placed, at least at the distance where the 1.0 second gas residence time at  1,800<sup>1</sup>  1,600<sup>2</sup> degrees was determined? -----  Yes ..No  
(Application or initial notification: <sup>1</sup> received on or after 8/30/89; <sup>2</sup> received before 8/30/89)

**PART III: MONITORING/RECORDKEEPING REQUIREMENTS** (continued)

- c. Are the following records kept on file, available for inspection, for at least the past two years?
- 1) All temperature measurements -----  Yes ..No
  - 2) all continuous monitoring systems, monitoring devices, and performance testing measurements; monitoring system all continuous performance evaluations -----  Yes ..No
  - 3) All CEMS or monitoring device calibration checks (last performed on (     ) ) -----  Yes ..No
  - 4) Adjustments -----  Yes ..No
  - 5) Preventive maintenance performed on systems/devices -----  Yes ..No
  - 6) Corrective maintenance performed on systems/devices -----  Yes ..No
- d. Are the temperature charts properly documented with operator name, operator indication of when cremation in the primary chamber was begun, date, time, and temperature markings -----  Yes ..No
- e. Was the crematory unit installed after **2/1/07**? If no, skip e.(1) – (3) -----  Yes ..No
- (1) Is the crematory unit equipped and operated with a pollutant monitoring system to automatically control combustion based on continuous in-stack opacity measurement? -----  Yes ..No
  - (2) Is the system calibrated to restrict combustion in the primary chamber whenever any opacity exceeds 15% opacity ? -----  Yes ..No
  - (3) Has the opacity measurement system been cleaned and checked for proper operation in accordance with the manufacturer's recommended maintenance schedule? -----  Yes ..No

**PART IV: SECONDARY COMBUSTION ZONE TEMPERATURES**

(check  only one box for each question)

1. If the application to construct was **BEFORE** August 30, 1989 is the:
- a. actual operating temperature of the secondary chamber combustion zone no less than **1400°F** throughout the combustion process in the primary chamber? -----  Yes ..No
  - b. secondary chamber combustion zone temperature equal to or greater than **1400°F** before the cremation process begins in the primary chamber? -----  Yes ..No
2. If the application to construct **ON** or **AFTER** August 30, 1989 is the:
- a. 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
  - b. secondary chamber combustion zone temperature equal to or greater than **1600°F** before the cremation process begins in the primary chamber? -----  Yes ..No

**PART V: ALLOWED MATERIALS**

(check  only one box for each question)

1. *Other than* human or fetal remains with appropriate containers or clothing, are any materials, including biomedical wastes, incinerated in the unit? -----  Yes ..No
2. Do cremation containers contain no more than 0.5 % (percent) by weight chlorinated plastics as certified by the manufacturer? -----  Yes ..No
- If yes, is the certifying documentation from the manufacturer kept on file for at least 2 years from use?  Yes ..No

**PART VI: EQUIPMENT MAINTENANCE**

(check  only one box for each question)

1. Is the crematory unit maintained in accordance with the manufacturer's specifications? -----  Yes ..No
2. Is there a written plan onsite which addresses the operating procedures during startup, shutdown and malfunction? -----  Yes ..No
3. Does the crematory allow for a visible check on the flame characteristics? -----  Yes ..No  
If no, skip a. – b.
- a. Was the flame characteristic visually checked at least once during each operating shift? -----  Yes ..No
- b. Was the flame adjusted when necessary? -----  Yes ..No

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

- IN COMPLIANCE  MINOR Non-COMPLIANCE  SIGNIFICANT Non-COMPLIANCE

**Emissions Unit Section**  
**2 – 100 LB/HR INDUSTRIAL EQUIPMENT CREMATION UNIT IE43-PP11**

**PART I: FILE REVIEW PRIOR TO INSPECTION**

(check  only one box for each question)

1. a. Complete AC application or, if no AC permit, initial GP registration received on or after August 30, 1989? -----  Yes ..No
- b. If yes, were design calculations provided then to confirm a sufficient volume in the secondary chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800 degrees Fahrenheit? -----  Yes ..No
2. Crematory unit installed after February 1, 2007? -----  Yes ..No
3. Date of last inspection: 7/9/10
4. Past Visible Emissions (VE) tests:
  - a. Was a VE test performed within each of the past 4 calendar years? -----  Yes ..No
  - b. Has a VE test been performed yet within the current calendar year? -----  Yes ..No
  - c. If first year of operation, was a VE test performed within 30 days of commencing operation? -----  N/A  Yes ..No
  - d. Date of last VE test: 2/18/10
  - e. Was the VE test report filed with the compliance authority no later than 45 days after the test? -----  Yes ..No
  - f. Did the facility demonstrate compliance during the last VE test? -----  Yes ..No  
 If no, what was the problem (if known)?

**PART II: VISIBLE EMISSIONS TESTING**

(check  only one box for each question)

1. **Was a visible emissions test conducted by the facility for this unit during this site visit?** -----  Yes ..No
  - a. Was the test conducted with the unit operating at a capacity of one adult-sized cadaver? -----  Yes ..No
  - b. Was the visible emissions test conducted according to EPA Method 9? -----  Yes ..No
  - c. The visible emission test resulted in an opacity of \_\_\_\_\_ % for the highest six minute average.
  - d. Did the visible emission test demonstrate compliance with the limit? -----  Yes ..No  
 (5% opacity, six-minute average, except that visible emissions not exceeding 15% opacity shall be allowed for up to six minutes in any one-hour)
2. **Was a visible emissions test conducted by the inspector during this site visit?** -----  Yes ..No
  - a. Was the test conducted with the unit operating at a capacity of one (1) adult-sized cadaver? -----  Yes ..No
  - b. Was the visible emissions test conducted according to EPA Method 9? -----  Yes ..No
  - c. The visible emission test resulted in an opacity of \_\_\_\_\_ % for the highest six minute average.
  - d. Did the visible emission test demonstrate compliance with the limit? -----  Yes ..No
3. **Is there any reason to ask for a special test to determine compliance with the PM and CO standards?** -----  Yes ..No  
 If yes, what reason?

**PART III: MONITORING/RECORDKEEPING REQUIREMENTS**

(check  only one box for each question)

1. **Were there any objectionable odors detected?** -----  Yes ..No  
 An upwind/downwind survey of the facility was conducted. The observed parameters were:  
 Downwind odor level detected- \_\_\_\_\_ Wind direction - \_\_\_\_\_ Upwind odor level detected- \_\_\_\_\_ (1-10)
2. **Continuous Monitoring Systems –**
  - a. Is a continuous temperature monitoring system installed on each unit to record temperatures in the secondary chamber in accordance with the manufacturer's instructions? -----  Yes ..No
  - b. Is the temperature probe properly placed, at least at the distance where the 1.0 second gas residence time at  1,800<sup>1</sup>  1,600<sup>2</sup> degrees was determined? -----  Yes ..No  
 (Application or initial notification: <sup>1</sup> received on or after 8/30/89; <sup>2</sup> received before 8/30/89)

**PART III: MONITORING/RECORDKEEPING REQUIREMENTS** (continued)

- c. Are the following records kept on file, available for inspection, for at least the past two years?
- 1) All temperature measurements -----  Yes ..No
  - 2) all continuous monitoring systems, monitoring devices, and performance testing measurements;  
monitoring system all continuous performance evaluations -----  Yes ..No
  - 3) All CEMS or monitoring device calibration checks (last performed on (     ) )-----  Yes ..No
  - 4) Adjustments -----  Yes ..No
  - 5) Preventive maintenance performed on systems/devices -----  Yes ..No
  - 6) Corrective maintenance performed on systems/devices -----  Yes ..No
- d. Are the temperature charts properly documented with operator name, operator indication of when cremation in the primary chamber was begun, date, time, and temperature markings -----  Yes ..No
- e. Was the crematory unit installed after **2/1/07**? If no, skip e.(1) – (3) -----  Yes ..No
- (1) Is the crematory unit equipped and operated with a pollutant monitoring system to automatically control combustion based on continuous in-stack opacity measurement? -----  Yes ..No
  - (2) Is the system calibrated to restrict combustion in the primary chamber whenever any opacity exceeds 15% opacity ? -----  Yes ..No
  - (3) Has the opacity measurement system been cleaned and checked for proper operation in accordance with the manufacturer’s recommended maintenance schedule? -----  Yes ..No

**PART IV: SECONDARY COMBUSTION ZONE TEMPERATURES**

(check  only one box for each question)

1. If the application to construct was **BEFORE** August 30, 1989 is the:
- a. actual operating temperature of the secondary chamber combustion zone no less than **1400°F** throughout the combustion process in the primary chamber? -----  Yes ..No
  - b. secondary chamber combustion zone temperature equal to or greater than **1400°F** before the cremation process begins in the primary chamber? -----  Yes ..No
2. If the application to construct **ON** or **AFTER** August 30, 1989 is the:
- a. 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
  - b. secondary chamber combustion zone temperature equal to or greater than **1600°F** before the cremation process begins in the primary chamber? -----  Yes ..No

**PART V: ALLOWED MATERIALS**

(check  only one box for each question)

1. *Other than* human or fetal remains with appropriate containers or clothing, are any materials, including biomedical wastes, incinerated in the unit? -----  Yes ..No
2. Do cremation containers contain no more than 0.5 % (percent) by weight chlorinated plastics as certified by the manufacturer? -----  Yes ..No
- If yes, is the certifying documentation from the manufacturer kept on file for at least 2 years from use?  Yes ..No

**PART VI: EQUIPMENT MAINTENANCE**

(check  only one box for each question)

1. Is the crematory unit maintained in accordance with the manufacturer's specifications? -----  Yes ..No
2. Is there a written plan onsite which addresses the operating procedures during startup, shutdown and malfunction? -----  Yes ..No
3. Does the crematory allow for a visible check on the flame characteristics? -----  Yes ..No  
If no, skip a. – b.
- a. Was the flame characteristic visually checked at least once during each operating shift? -----  Yes ..No
- b. Was the flame adjusted when necessary? -----  Yes ..No

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

IN COMPLIANCE  MINOR Non-COMPLIANCE  SIGNIFICANT Non-COMPLIANCE

**Emissions Unit Section**  
**3 – A 100 LB/HR MODEL #IE 43-PP1, POWER PAK II CREMATORY**

**PART I: FILE REVIEW PRIOR TO INSPECTION**

(check  only one box for each question)

1. a. Complete AC application or, if no AC permit, initial GP registration received on or after August 30, 1989? -----  Yes ..No
- b. If yes, were design calculations provided then to confirm a sufficient volume in the secondary chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800 degrees Fahrenheit? -----  Yes ..No
2. Crematory unit installed after February 1, 2007? -----  Yes ..No
3. Date of last inspection: -----
4. Past Visible Emissions (VE) tests:
  - a. Was a VE test performed within each of the past 4 calendar years? -----  Yes ..No
  - b. Has a VE test been performed yet within the current calendar year? -----  Yes ..No
  - c. If first year of operation, was a VE test performed within 30 days of commencing operation? -----  N/A  Yes ..No
  - d. Date of last VE test: 2/18/10
  - e. Was the VE test report filed with the compliance authority no later than 45 days after the test? -----  Yes ..No
  - f. Did the facility demonstrate compliance during the last VE test? -----  Yes ..No  
 If no, what was the problem (if known)? -----

**PART II: VISIBLE EMISSIONS TESTING**

(check  only one box for each question)

1. **Was a visible emissions test conducted by the facility for this unit during this site visit?** -----  Yes ..No
  - a. Was the test conducted with the unit operating at a capacity of one adult-sized cadaver? -----  Yes ..No
  - b. Was the visible emissions test conducted according to EPA Method 9? -----  Yes ..No
  - c. The visible emission test resulted in an opacity of \_\_\_\_\_ % for the highest six minute average.
  - d. Did the visible emission test demonstrate compliance with the limit? -----  Yes ..No  
 (5% opacity, six-minute average, except that visible emissions not exceeding 15% opacity shall be allowed for up to six minutes in any one-hour)
2. **Was a visible emissions test conducted by the inspector during this site visit?** -----  Yes ..No
  - a. Was the test conducted with the unit operating at a capacity of one (1) adult-sized cadaver? -----  Yes ..No
  - b. Was the visible emissions test conducted according to EPA Method 9? -----  Yes ..No
  - c. The visible emission test resulted in an opacity of \_\_\_\_\_ % for the highest six minute average.
  - d. Did the visible emission test demonstrate compliance with the limit? -----  Yes ..No
3. **Is there any reason to ask for a special test to determine compliance with the PM and CO standards?** -----  Yes ..No  
 If yes, what reason? -----

**PART III: MONITORING/RECORDKEEPING REQUIREMENTS**

(check  only one box for each question)

1. **Were there any objectionable odors detected?** -----  Yes ..No  
 An upwind/downwind survey of the facility was conducted. The observed parameters were:  
 Downwind odor level detected- \_\_\_\_\_ Wind direction - \_\_\_\_\_ Upwind odor level detected- \_\_\_\_\_ (1-10)
2. **Continuous Monitoring Systems –**
  - a. Is a continuous temperature monitoring system installed on each unit to record temperatures in the secondary chamber in accordance with the manufacturer's instructions? -----  Yes ..No
  - b. Is the temperature probe properly placed, at least at the distance where the 1.0 second gas residence time at  1,800<sup>1</sup>  1,600<sup>2</sup> degrees was determined? -----  Yes ..No  
 (Application or initial notification: <sup>1</sup> received on or after 8/30/89; <sup>2</sup> received before 8/30/89)



**PART III: MONITORING/RECORDKEEPING REQUIREMENTS** (continued)

- c. Are the following records kept on file, available for inspection, for at least the past two years?
- 1) All temperature measurements -----  Yes ..No
  - 2) all continuous monitoring systems, monitoring devices, and performance testing measurements;  
monitoring system all continuous performance evaluations -----  Yes ..No
  - 3) All CEMS or monitoring device calibration checks (last performed on (     ) )-----  Yes ..No
  - 4) Adjustments -----  Yes ..No
  - 5) Preventive maintenance performed on systems/devices -----  Yes ..No
  - 6) Corrective maintenance performed on systems/devices -----  Yes ..No
- d. Are the temperature charts properly documented with operator name, operator indication of when cremation in the primary chamber was begun, date, time, and temperature markings -----  Yes ..No
- e. Was the crematory unit installed after **2/1/07**? If no, skip e.(1) – (3) -----  Yes ..No
- (1) Is the crematory unit equipped and operated with a pollutant monitoring system to automatically control combustion based on continuous in-stack opacity measurement? -----  Yes ..No
  - (2) Is the system calibrated to restrict combustion in the primary chamber whenever any opacity exceeds 15% opacity ? -----  Yes ..No
  - (3) Has the opacity measurement system been cleaned and checked for proper operation in accordance with the manufacturer’s recommended maintenance schedule? -----  Yes ..No

**PART IV: SECONDARY COMBUSTION ZONE TEMPERATURES**

(check  only one box for each question)

1. If the application to construct was **BEFORE** August 30, 1989 is the:
- a. actual operating temperature of the secondary chamber combustion zone no less than **1400°F** throughout the combustion process in the primary chamber? -----  Yes ..No
  - b. secondary chamber combustion zone temperature equal to or greater than **1400°F** before the cremation process begins in the primary chamber? -----  Yes ..No
2. If the application to construct **ON** or **AFTER** August 30, 1989 is the:
- a. 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
  - b. secondary chamber combustion zone temperature equal to or greater than **1600°F** before the cremation process begins in the primary chamber? -----  Yes ..No

**PART V: ALLOWED MATERIALS**

(check  only one box for each question)

1. *Other than* human or fetal remains with appropriate containers or clothing, are any materials, including biomedical wastes, incinerated in the unit? -----  Yes ..No
2. Do cremation containers contain no more than 0.5 % (percent) by weight chlorinated plastics as certified by the manufacturer? -----  Yes ..No
- If yes, is the certifying documentation from the manufacturer kept on file for at least 2 years from use?  Yes ..No

**PART VI: EQUIPMENT MAINTENANCE**

(check  only one box for each question)

- 1. Is the crematory unit maintained in accordance with the manufacturer's specifications? -----  Yes ..No
- 2. Is there a written plan onsite which addresses the operating procedures during startup, shutdown and malfunction? -----  Yes ..No
- 3. Does the crematory allow for a visible check on the flame characteristics? -----  Yes ..No  
If no, skip a. – b.
  - a. Was the flame characteristic visually checked at least once during each operating shift? -----  Yes ..No
  - b. Was the flame adjusted when necessary? -----  Yes ..No

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

- IN COMPLIANCE  MINOR Non-COMPLIANCE  SIGNIFICANT Non-COMPLIANCE

**Facility Section (continued)**

**SPECIAL CONDITIONS AND PROCEDURES**

(check  only one box for each question)

Administrative Changes:

- 1. Were there any changes in the name, address, or phone number of the facility or authorized representative not associated with a change in ownership or with a physical relocation of the facility or any emissions units or operations comprising the facility; or any other similar minor administrative change at the facility? ----  Yes ..No
- 2. If yes, did the facility provide written notification within 30 days of the change? -----  Yes ..No

New or Modified Process Equipment or Change in Ownership:

- 3. Since the last registration form submittal has there been -----  Yes ..No
  - a. Installation of any new process equipment? -----  Yes ..No
  - b. Alterations to existing process equipment without replacement? -----  Yes ..No
  - c. Replacement of existing equipment with equipment that is substantially different? -----  Yes ..No
  - d. A change in ownership? -----  Yes ..No
- If the any answer to 3a. – d. is Yes , was a new registration form and the appropriate fee submitted 30 days prior to the change? -----  Yes ..No

C.Pitters

2/8/10

Inspector's Name (Please Print)

Date of Inspection

2/8/11

Inspector's Signature

Approximate Date of Next Inspection

**COMMENTS:**