



HUMAN CREMATORY

COMPLIANCE INSPECTION CHECKLIST



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

AIRS ID#: 0090019 **DATE:** 2/25/09 **ARRIVE:** _____ **DEPART:** _____

FACILITY NAME: MELBOURNE CREMATORY (Brownlie-Maxwell Funeral Home P.A.)

FACILITY LOCATION: 1010 E PALMETTO AVE
MELBOURNE 32901

OWNER/AUTHORIZED REPRESENTATIVE: MICHAEL BROWNLIE **PHONE:** (321)727-1746

CONTACT NAME: Michael Brownlee **PHONE:** (321)727-1746

ENTITLEMENT PERIOD: 4/29/2004 / 4/29/2009
(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% O₂ 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 (ft³) of flue gas, corrected to 7% O₂ 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

Allen Rainey

2/25/09

Inspector's Name (Please Print)

Date of Inspection

2/25/10

Inspector's Signature

Approximate Date of Next Inspection

COMMENTS:

1. Upon my arrival, the PowerPak II Industrial Equipment & Engineering Co. crematory unit was completing the cremation started for the visible emission test done by Arlington Environmental. The digital temperature device showed 1,623 degrees F., and the temperature chart showed the same temperature. The crematory operator stated the unit took a long time to warm up and that a 400-pound body was cremated. Mr. Brownlie stated the unit was installed two or three years ago. Records received 3/12/09 indicate the unit was installed in May 1993.
2. Questions in Part II, numbers 3 - 8, Part III, number 3 and Part IV, numbers 2 & 3 are not applicable.
3. Requested temperature chart records from January 2007 to the present. Performed random review of temperature chart records provided from November 2006 to the present. One temperature chart is used for multiple days, with seven to eight cremations per chart and no more than three cremations per day. The operator's name is not recorded on the charts.
4. From Nov. 2006 to 7/14/08, the temperature chart recordings show that cremations occurred at or above 1,600 degrees F. After 7/14/08, which is on or before a refractory re-build was done, cremations frequently started before the temperature in the secondary chamber reached 1,600 degrees F., and throughout the cremations, temperatures frequently dropped below 1,600 degrees. Noncompliance with temperature requirements was observed within at least 95 cremations from 7/14/08 to 3/2/09. Additional cremations after 11/18/08 were spot-checked during the inspection and were not performed at the required temperature. Received copies of charts for cremations performed 7/14/08 to 3/2/09. Highlighted temperature markings show improper cremation temperatures. The crematory operator stated the unit's afterburner shuts off in the middle of cremations. The facility has failed to comply with operation temperature requirements (Rule 62-296.401(5)(c)1, F.A.C.).
5. Requested maintenance, repair and calibration records from January 2007 to January 2009 (received 3/12/09). Service Call Checklist dated 5/13/08 indicates the unit needs to be rebuilt. It indicates the unit chamber walls were falling apart, the throat roof was half gone, the divider wall was very close to collapsing, and that the floor was incapable of containing fluids. As indicated above, the unit was rebuilt on or before 7/14/08 (copy of specific work activities performed on that date was not provided in records received 3/12/09). The facility has failed to comply with equipment maintenance requirements (Rule 62-296.401(5)(e), F.A.C.).
6. No body bags are incinerated. Material Safety Data Sheets (MSDS) are maintained on all cremation products. Only cardboard boxes that do not contain plastics are incinerated.
7. A re-registration form was received by the Department's Tallahassee office on 2/13/09.