HUMAN CREMATORY

COMPLIANCE INSPECTION CHECKLIST

Environmental Compliance

INSPECTION TYPE: ANNUAL (INS1, INS2) ☒ COMPLAINT/DISCOVERY (CI) ☐

RE-INSPECTION (FUI) ☐ ARMS COMPLAINT NO:

AIRS ID#: 0870057 **DATE:** 8-27-2008 **ARRIVE:** 4PM **DEPART:** _____

FACILITY NAME: FLORIDA KEYS CREMATORY

FACILITY LOCATION: U.S. HIGHWAY 1, MM 10 1/2

BIG COPPITT KEY 33040

OWNER/AUTHORIZED REPRESENTATIVE: J. DEAN **PHONE:** (305)294-1066

CONTACT NAME: **PHONE:**

ENTITLEMENT PERIOD: 10/25/2004 (effective date) / 10/25/2009 (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.)?----------see comments---------- ☐ 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_2 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^3)of flue gas, corrected to 7% O_2 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

***see details on the following page.**

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? **No actual container is used other than a blanket**- ☐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

Barbara Nevins	8-27-08
Inspector's Name (Please Print)	Date of Inspection
Barbara Nevins	9-27-08
Inspector's Signature	Approximate Date of Next Inspection

COMMENTS:

I was notified of this VE test schedule via a telephone call from John Curry, test consultant. The Cremation was to begin at 4 pm. I told him I would attend, but that if I did not arrive on time due to traffic delays the start of the cremation need not be delayed.

I arrived on site at 4 pm. I observed heat waves and no emissions coming from the facility stack. Inside the building, I located Mr. Curry, Peter Gomez, the crematory operator, and two other funeral home employees. The cremation had already begun. Mr. Curry and the Operator told me that they started the cremation at 3:45 pm. Mr. Curry said, yes, he had started his VE observations at 3:45. I questioned how he was doing 15 second VE readings standing inside the building. He left the building. I later observed that he had moved his vehicle from where it was parked by the side of the building to the usual observation point across the gravel road. He was taking readings from his car through the open side window.

When I arrived at 4 pm, the temperature gauge showed a temperature above 1600 degrees. The chart recorder was not set at the correct time indicating a few minutes before 4 pm, when it was actually after 4 (see same photo #16). A handwritten note on the chart, TOC 4:15, was observed and photographed. When the operator was questioned he said that he had planned to wait for me and start the cremation at 4:15, however the consultant told him to go ahead and start at 3:45. I explained that the consultant observes, and the operator manages the cremation. He had already written 4:15 on the chart and in the operator's logbook. I explained that an error could be corrected by drawing a line through the error and initialing. He did this for the operator's logbook and the chart recorder, changing the TOC from 4:15 to 3:45. I explained to him, how his record, the recorded chart, inaccurately reflects the conditions of this cremation. I explained the importance of accurate records for a self monitored facility.

A VE report for this cremation was submitted to the Department by Mr. Curry on September 3, 2008. The report indicated uninterrupted VE readings from 1545 until 1645 hours. This VE test and report shall not be accepted by the Department for two reasons. The test was started prior to the scheduled time of 4 pm, whereby the Department did not have an opportunity to observe the entire VE test. Also, I observed Mr. Curry inside the building during the same period of time that he reported taking opacity readings every 15 seconds. I did not perform a VE test during the cremation. **Another VE test must be performed.**

The Crematory is only used occasionally. A single chart is used for several cremations over a period of several days with the date and time handwritten on the chart. The handwritten notes should accurately reflect the temperatures during the cremation and the time/date. On a positive note, there was ink in the recorder pen. Also, instead of boxes or boards, the bodies are now wrapped in a blanket and slid into the chamber on a plastic EMT type carrier over cardboard rollers. The carrier is removed so that the only container cremated is the blanket. Photos taken during this inspection are attached to this report.