



ANIMAL CREMATORY



COMPLIANCE INSPECTION CHECKLIST

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

AIRS ID#: 1270011 **DATE:** 12/21/09 **ARRIVE:** _____ **DEPART:** _____

FACILITY NAME: HALIFAX HUMANE SOCIETY

FACILITY LOCATION: 2364 W LPGA BLVD
 DAYTONA BEACH 32120-

OWNER/AUTHORIZED REPRESENTATIVE: James Noe **PHONE:** (386)274-4703

CONTACT NAME: Jim Owens **PHONE:** (386)274-4703

ENTITLEMENT PERIOD: 10/29/2006 / 10/29/2011
 (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(6)(j), 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 leak-proof containers containing no more than 0.5 % (percent) by weight chlorinated plastics used during the cremation of dead animals?----- 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) If plastic bags are used for the cremation of animals are they non-chlorinated and no less than 3 mils thick?----- Yes No
 - c) Are dead animals, which have been used for medical or commercial experimentation, or other materials, including biomedical wastes (Rule 62-210.200, F.A.C.), incinerated at this location?----- Yes No
6. During this review period, was the largest batch load cremated 500 pounds per hour or less?----- Yes No
7. Have all crematory operators been trained and certified by a Department-approved training program?--- Yes No
 - a) Are copies of the training certificates 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

12/21/09

Inspector's Name (Please Print)

Date of Inspection

Inspector's Signature

Approximate Date of Next Inspection

COMMENTS:

1. I performed an INS2 compliance inspection for the Crawford Equipment & Engineering crematory, model CB98SW, serial #008361201. The unit is fueled by natural gas. Jim Owens, Maintenance Manager, escorted me to the crematory and provided requested records.
2. The crematory was in operation. It consists of two, stacked circular structures, with the secondary chamber on top. I connected the Fluke Thermocouple Calibrator loaned by Orange County Environmental Protection Division to the secondary chamber thermocouple on the front side of the unit above the loading door and documented consistent temperature readings: Fluke device = 1,735 degrees F., program logic controller (PLC) = 1736 degrees F., digital display on the chart recorder = 1,736 degrees F. and analog chart recorder = ~ 1,750 degrees F.
3. The PLC displaying the secondary chamber temperature was missing the face cover. An LED was blinking on the display. There was another identical PLC display with a face cover, and the LED in the same position as the blinking one was labeled "ALM." Mr. Owens did not know what it meant.
4. According to Mr. Owens, there are two or three crematory operators. Mass cremations of up to 1,200 lbs. are performed.
5. The animals are cremated in Husky brand Contractor Clean-up plastic bags, 3 mils thick, 42 gallons. A Material Safety Data Sheet for the bags shows they are composed of nonchlorinated materials.
6. Spot-checked temperature charts from December 2007 to the present. There is one mass cremation recorded on each chart, and cremations are done nearly every day. Most of the charts show a steady temperature modulation around 1,775 degrees F. However, there are many dates in which temperatures dropped below 1,600 degrees F. during the primary chamber combustion process. Also, beginning in November 2009, the temperature markings show unusually high temperatures near or above 2,500 degrees F. Mr. Owens stated a part to regulate air flow has been ordered. The order is documented in a December 2009 receipt. There are also many dates where temperature marking are missing or not recorded at all. There are no markings on the charts to indicate when cremation in the primary chamber began. Requested copies of temperature charts for Department file.
7. Adjustment, calibration and corrective maintenance records are written on the charts.
8. I advised Mr. Owens that the unit needs to be taken out of service and not used again until it is repaired, and I read for him Rule 62/296.401(6)(e), F.A.C.
9. There is a discolored area on the secondary chamber exterior near the thermocouple electrical connector. Mr. Owens reports that the secondary chamber got too hot and caused the exterior to burn. A repair to the refractory is documented in an October 2009 receipt. In December 2009, a secondary chamber baffle was repaired. A chart dated December 5, 2009 shows test temperatures during a curing for a new refractory.
10. Reviewed adjustment, calibration and corrective maintenance records.
11. No photographs were taken because of a camera malfunction.

