

EPA VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One) Method 1 203A 203B Other: _____

Company Name
MIAMI DASE ZOOLOGICAL PARK

Facility Name

Street Address
12400 SW 152 ST

City **MIAMI** State **FL** Zip **33177**

Process **INCINERATION** Unit # **001** Operating Mode **FULL**

Control Equipment **AFTER BURNER** Operating Mode

Describe Emission Point
**ANIMAL CREMATORY
EMISSION STACK**

Height of Emiss. Pt. Start **30'** End _____ Height of Emiss. Pt. Rel. to Observer Start **30'** End _____

Distance to Emiss. Pt. Start **200'** End _____ Direction to Emiss. Pt. (Degrees) Start **240** End _____

Vertical Angle to Obs. Pt. Start **S** End _____ Direction to Obs. Pt. (Degrees) Start **240** End _____

Distance and Direction to Observation Point from Emission Point Start **300', 60°** End _____

Describe Emissions
Start **HEAT** End _____

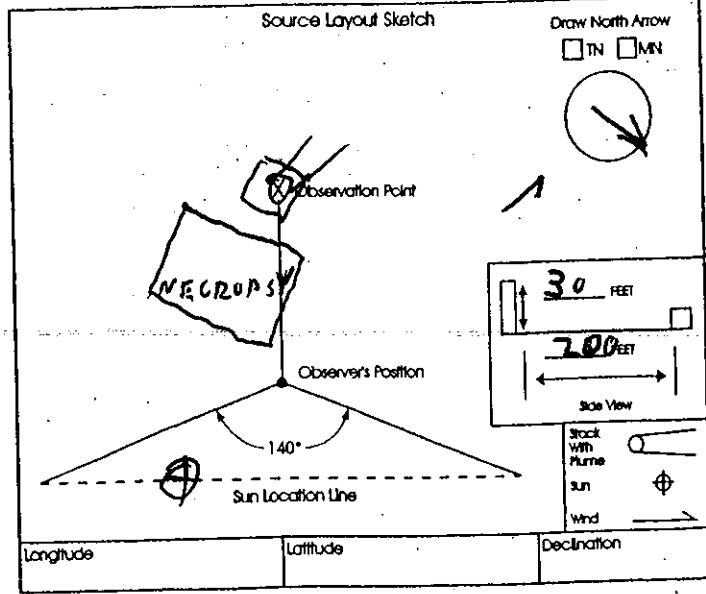
Emission Color Start **CLEAR** End _____ Water Droplet Plume Attached Detached None

Describe Plume Background
Start **BLUE / CLOUDS** End _____

Background Color Start **WHITE / BLUE** End _____ Sky Conditions Start **BRKF.A.** End _____

Wind Speed Start **S-10** End _____ Wind Direction Start **E** End _____

Ambient Temp. Wet Bulb Temp. RH Forecast



Additional Information
AIRS ID # 0250320

Form Number _____ Page _____ Of _____

Continued on VEO Form Number _____

Observation Date		Time Zone				Start Time	End Time
8/27/08						9:29	9:59
Sec	0	15	30	45	Comments		
Mn							
1	S	0	0	0			
2	0	0	0	0			
3	0	0	0	0			
4	0	0	0	0			
5	0	0	0	0			
6	0	0	S	S			
7	0	0	0	0			
8	0	0	0	0			
9	S	0	0	0			
10	0	0	0	0			
11	0	0	0	0			
12	0	0	0	0			
13	0	0	S	S			
14	S	S	0	0			
15	0	0	0	0			
16	0	0	0	S			
17	0	0	0	0			
18	0	0	0	0			
19	S	10	0	0			
20	0	0	0	0			
21	0	S	S	0			
22	0	0	0	0			
23	0	0	S	S			
24	10	10	0	0			
25	0	0	0	0			
26	0	S	10	0			
27	0	0	0	0			
28	0	0	S	0			
29	S	S	0	0			
30	0	0	0	0			

Observer's Name (Print) **J. VINCENT**

Observer's Signature *J. Vincent* Date **8/27/08**

Organization **FDEP**

Certified By **KYA** Date **7/9/08**



ANIMAL CREMATORY



COMPLIANCE INSPECTION CHECKLIST

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

AIRS ID#: 0250320 DATE: 8/27/08 ARRIVE: 9:20 DEPART: 11:15
 FACILITY NAME: MIAMI DADE ZOOLOGICAL PARK
 FACILITY LOCATION: 168 ST & 122 AVE
 MIAMI 33177
 OWNER/AUTHORIZED REPRESENTATIVE: ERIC STEPHENS PHONE: (305)251-0400
 CONTACT NAME: DR. CHRISTINE Z. MILLER PHONE: 305-253-5050
 ENTITLEMENT PERIOD: 10/8/2005 / 10/7/2010
(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

J. VINCENT

Inspector's Name (Please Print)

8/27/08

Date of Inspection



Inspector's Signature

8/27/09

Approximate Date of Next Inspection

COMMENTS:

WITNESSED VISUAL EMISSIONS TEST
CONDUCTED BY FRANCIS MORLU OF SOUTH
FLORIDA ENVIRONMENTAL SERVICES. DR.
CHRISTINE MILLER OF METRO ZOO WAS
PRESENT. CONDUCTED 30 MINUTE VE,
INSPECTED UNIT AND AIR RECORDS INCLUDING
DADE COUNTY AIR PERMIT. SEVERAL GOATS,
SHEEP, TOADS, AND A POSSUM WERE
CREMATED. FACILITY IS IN COMPLIANCE.