F&A Receipt 524275
Aug 12 2011

HUMAN CREMATORY
AIR GENERAL PERMIT REGISTRATION FORM

Part II. Notification to Permitting Office

(Detach and submit to appropriate permitting office; keep copy onsite)

Instructions: To give notice to the Department of an eligible facility's intent to use this air general permit, the owner or operator of the facility must detach and complete this part of the Air General Permit Registration Form and submit it to the appropriate Department of Environmental Protection or local air pollution control program office which has permitting authority. Please type or print clearly all information, and enclose the appropriate air general permit registration processing fee pursuant to Rule 62-4.050, F.A.C. *($100 as of the effective date of this form)*

0810193-005

Registration Type

Check one:

INITIAL REGISTRATION – Notification of intent to:

☒ Construct and operate a proposed new facility.

☐ Operate an existing facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit).

RE-REGISTRATION (for facilities currently using an air general permit) - Notification of intent to:

☐ Continue operating the facility after expiration of the current term of air general permit use.

☐ Continue operating the facility after a change of ownership.

☒ Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C., or any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.

Facility Arms Number: 0810193-004

Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only

If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. In such case, check the first box, and indicate the operation permits being surrendered. If no air operation permits are held by the facility, check the second box.

☐ All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s): _____

☐ No air operation permits currently exist for this facility.

General Facility Information

Facility Owner/Company Name (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)
Brasota Services, Inc.

Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a registration form must be completed for each.)
Brasota Services, Inc.

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)
Street Address: 1410 Commerce Blvd, Unit R
City: Sarasota County: Manatee Zip Code:34243-5029

Facility Start-Up Date (Estimated start-up date of proposed **new** facility.) (N/A for existing facility)
November 2011

Owner/Authorized Representative

Name and Position Title (Person who, by signing this form below, certifies that the facility is eligible to use this air general permit.)
Print Name and Title: Charles Hague, Vice-President

Owner/Authorized Representative Mailing Address
Organization/Firm: Brasota Services, Inc.
Street Address: 1410 Commerce Blvd, Unit R
City: Sarasota County: Manatee Zip Code: 34243-5029

Owner/Authorized Representative Telephone Numbers
Telephone: 941-358-1228 Fax: 941-358-3810
Cell phone (optional):

Facility Contact (If different from Owner/Authorized Representative)

Name and Position Title (Plant manager or person to be contacted regarding day-to-day operations at the facility.)
Print Name and Title: : Charles A. Hague

Facility Contact Mailing Address
Organization/Firm:
Street Address:
City: County: Zip Code:

Facility Contact Telephone Numbers
Telephone: Fax:
Cell phone (optional):

Owner/Authorized Representative Statement

This statement must be signed and dated by the person named above as owner or authorized representative

I, the undersigned, am the owner or authorized representative of the owner or operator of the facility addressed in this Air General Permit Registration Form. I hereby certify, based on information and belief formed after reasonable inquiry, that the facility addressed in this registration form is eligible for use of this air general permit and that the statements made in this registration form are true, accurate and complete. Further, I agree to operate and maintain the facility described in this registration form so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof.

I will promptly notify the Department of any changes to the information contained in this registration form.

C A Hague
Signature

8-9-11
Date

Design Calculations

If this is an initial registration for a proposed new human crematory unit, provide design calculations 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 F.

☒ Manufacturer's' design calculations attached. - See Attachment 1 for compliance test report

☐ Registration is not for proposed new human crematory unit(s).

Description of Facility

Below, or as an attachment to this form, provide a description of all crematory operations at the facility in sufficient detail to demonstrate the facility's eligibility for use of this air general permit and to provide a basis for tracking any future equipment or process changes at the facility. Describe all air pollutant-emitting processes and equipment at the facility, and identify any air pollution control measures or equipment used.

Brasota Services, Inc. plans to add a second crematory to their existing facility.

Equipment Description

The "Classic" is a multi-chamber unit having an average 150 - 200 lbs/hr fired with natural gas. The primary chamber burner is rated at 500,000 Btu/hr, and the secondary chamber burner is rated at 1,500,000 Btu/hr, for a total of 2,000,000 Btu/hr. Control of air pollution is achieved through the design of the "Classic" crematory, including its ability to operate the secondary chamber between 1600 - 1850 degrees Fahrenheit at a residence time in excess of 1.0 second. The design also includes fully automatic PLC based controls, independent fuel/air systems, preheated combustion air, secondary chamber temperature monitor an recorder, primary burner temperature interlock (prevents primary burner from firing prior to the secondary chamber reaching it's set point temperature), UV continuous scanning flame detectors on burners, and an opacity sensor which can temporarily suspends operation of the primary chamber burner. In attachment 2 we have include a copy of the crematory spec. As the equipment is under construction, no serial number has been assigned.

Currently the facility operates a Power-Pak crematory serial number 064398, permit 0810193-004.

Emissions Summary

Emission Summary and Calculations – Air pollution control is demonstrated through identical source stack testing. (see Attachment 1). See Attachment 3 for tabular summary of emissions. Criteria pollutant emissions values, except CO and PM are based on emission factors from AP-42, Table 2.1-12. The emission for CO and PM are derived from results of the identical source stack test.

Retention Time

The retention time was measured on an identical unit at 1.95 seconds at 1800^0F.

Attachment 1
Compliance Test Report

Arlington Environmental Services, Inc.

Post Office Box 657 ~ Okeechobee, Florida 34973
605 SW Park Street, Suite 209 ~ Okeechobee, Florida 34974
Telephone (863) 467-0555 ~ Facsimile (863) 357-0810
www.arlingtonenvironmental.com

U.S. Cremation Equipment
598 South Northlake Boulevard, Suite 1016
Altamonte Springs, FL 32701

RE: FID 0112701 – Guiding Light Cremations, LLC
Emission Testing Conducted March 3 & 4, 2010
Make: US Cremation Equipment
Model: Classic Human Crematory

To Whom It May Concern:

Emission testing for Particulate, Visible, Carbon Monoxide, and Hydrogen Chloride, EPA Methods 1-5, 9, 10, and 26A, was conducted on March 3 & 4, 2010 at the above referenced facility. The units tested were manufactured by US Cremation Equipment and both units were model Classic Human Crematory. In the event you have any questions please do not hesitate to contact me at (863) 467-0555.

Sincerely,

Noah A. Handley, P.E.
Vice President, Principal Engineer,
Arlington Environmental Services, Inc.

Arlington Environmental Services, Inc.

"Specializing in Visible Emission and Stack Testing"

April 8, 2010

ELECTRONIC CORRESPONDENCE

Broward County
Air Quality Division
1 North University Drive, Suite 203
Plantation, Florida 33324

Re: Guiding Light Cremations LLC, Unit 1
AIRS ID: 0112701

To Whom It May Concern:

On March 03 and 04, 2010, source tests for particulate, visible and carbon monoxide emissions (EPA Methods 1-5, 9 and 10) were conducted on the exhaust stack servicing the crematory incinerator, Unit 1 at Guiding Light Cremations LLC, ID 0112701 located at 2431 SW 56th Terrace in West Park, Florida.

The tests were performed in order to comply with the Broward County Department of Planning and Environmental Protection, Air Quality Division, Chapter 27 Article IV, Air Quality, Section 27-179(c)(2). The results comply with Florida's Human Crematory Rule 62-296.401(5), FAC.

The following emission point was tested:

- EU001 Exhaust stack servicing the afterburner

To the best of my knowledge, this completes all of the required initial testing. If, for any reason, this is incorrect, please contact me as soon as possible.

Sincerely,

Debra M. Carter

Debra Carter

/dc

Electronic Copy to: Geronimo Mena, Jr., Guiding Light Cremations LLC
David Krohn, Guiding Light Cremations, LLC

Post Office Box 657 ~ Okeechobee, Florida 34973
Telephone (863) 467-0555 ~ Facsimile (863) 357-0810
Email info@arlingtonenvironmental.com ~ Website www.arlingtonenvironmental.com

Source Test Report
for
Particulate, Visible and CO Emissions

EPA Methods 1-5, 9 and 10

Report 2982-S

March 03 and 04, 2010

prepared for

Guiding Light Cremations LLC
Unit 1
Facility ID 0112701

Arlington Environmental Services, Inc.

Post Office Box 657 ~ Okeechobee, Florida 34973 ~ Telephone 863.467.0555

Table of Contents

1.0 Introduction

Guiding Light Cremations LLC operates a human crematory located at 2431 SW 56th Terrace in West Park, FL. On March 03 and 04, 2010, source tests for particulate (EPA Methods 1-5, 9) and Carbon Monoxide (EPA Method 10) were conducted on Unit 1 exhaust stack servicing the crematory incinerator.

The tests were performed in order to comply with the Broward County Department of Planning and Environmental Protection, Air Quality Division, Chapter 27 Article IV, Air Quality, Section 27-179(c)(2). The results comply with Florida's Human Crematory Rule 62-296.401(5), FAC.

Courtney Pitters of the Broward County Division of Environmental Protection, Air Quality Division was present for a portion of the tests.

The residence time for this test was 1.95 seconds. The substantiating calculations are presented in Appendix D.

The average particulate emission rate, as determined by EPA Method 5, was 0.0201 gr/dscf corrected to 7% O_2. The allowable particulate emission rate is 0.080 gr./dscf corrected to 7% O_2.

The average carbon monoxide emission rate as determined by EPA Method 10, was 10.37 ppm corrected to 7% O_2. The allowable carbon monoxide emission rate is 100 ppm . corrected to 7% O_2.

The average visible emission rate as determined by EPA Method 9, was 0.0%. The allowable visible emission rate (highest six minute average) is 5% with 15% opacity allowed for a six minute period in an hour.

The results of this test verify compliance with the Florida Department of Environmental Protection Human Crematory Rule 62-296.401(5).

2.0 Certification of Test Results

Facility Tested: Guiding Light Cremations LLC
2431 SW 56th Terrace
West Park, FL 33325

Type Process - Human Crematory

Abatement Device - Afterburner

Report 2982-S

March 03 and 04, 2010

Run Numbers 1, 2 and 3

Actual Particulate Emissions - 0.0201 gr/dscf (corrected to 7% O_2)
Allowable Particulate Emissions - 0.0800 gr./dscf (corrected to 7% O_2)

Actual Carbon Monoxide Emissions - 10.37 ppm (corrected to 7% O_2)
Allowable Carbon Monoxide Emissions - 100 ppm (corrected to 7% O_2)

Actual Visible Emissions - 0.0%
Allowable Visible Emissions - 5% with 15% allowed for a six minute period in one hour

All testing and analysis were performed in accordance with the Florida Department of Environmental Protection Human Crematory Rule 62-296.401(5), Florida Administrative Code.

I hereby certify that to my knowledge, all information and data submitted in this report is true and correct.

William D. Arlington
Project Director

3.0 Allowable Emission Determination

The allowable emissions were determined in accordance with 62.296.401(5) F.A.C. Substantiating data and calculations are presented in the Appendix D.

4.0 Cyclonic Flow Determination

Due to the configuration of the system, cyclonic flow was considered to be non-existent at the sampling site.

5.0 Summary of Results
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

	Run 1	Run 2	Run 3	Average
Date	3/3/2010	3/3/2010	3/3/2010	Average
Start Time	10:10	11:45	14:30	
Stop Time	11:15	12:49	15:37	
Process Rate (lbs)	175		175	175
Particulate Emission Rate (gr./dscf @ 7% O_2)	0.0191	0.0147	0.0265	0.0201
Allowable Particulate Emission Rate (gr./dscf @7% O_2)	0.080	0.080	0.080	0.080
Carbon Monoxide Emission Rate (ppm @7% O_2)	24.20	3.12	3.78	10.37
Allowable Carbon Monoxide Emission Rate (ppm @7% O_2)	100	100	100	100
Date				3/4/10
Visible Emission Rate (%) (highest six minute average)				0.00
Allowable Visible Emission Rate (%) (with up to 15% for 6 min. per hour)				5

6.0 Particulate Emission Results
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

	Run 1	Run 2	Run 3
Area (square feet)	3.08	3.08	3.08
Stack Pressure (inches Hg)	29.92	29.92	29.92
Meter Pressure (inches Hg)	30.08	30.10	30.09
Sample Volume (Std. Cu. Ft.)	50.049	52.088	51.365
Water Vapor (Cubic Feet)	5.60	4.13	4.72
Sample Moisture (percent)	10.07	7.35	8.41
Saturation Moisture (percent)	100.00	100.00	100.00
Molecular Weight (lbs/lb Mole wet)	28.15	28.46	28.34
Velocity (fpm)	802	859	862
Volumetric Flow Rate (acfm)	2472	2647	2659
Volumetric Flow Rate (scfm)	848	912	890
Concentration (gr/dscf)	0.0092	0.0072	0.0132
Concentration@7% O2 (gr/dscf)	0.0191	0.0147	0.0265
Mass Emission Rate (lbs./hr.)	0.07	0.06	0.10
Percent Isokinetic	98.84	95.61	96.65

7.0 Visible Emission Results
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

Emission Point	Allowable Emission Rate (highest six minute average)	Emission Rate (highest six minute average)	Average Opacity
Exhaust Stack	0	0.00	0.00

8.0 Carbon Monoxide Emission Results
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

	Run1	Run 2	Run 3	Average
Date	3/3/2010	3/3/2010	3/3/2010	
Start Time	10:10	11:45	14:30	
Stop Time	11:15	12:49	15:37	
Percent Oxygen	14.2	14.11	14.00	
Carbon Monoxide (PPM)	11.66	1.52	1.88	
Carbon Monoxide Emissions (PPM @ 7% O_2)	24.20	3.12	3.78	10.37
Carbon Monoxide Allowable (PPM@ 7% O_2)	100	100	100	100

9.0 Overview of Field and Analytical Procedures

9.1 EPA Method 1 - Sample and Velocity Traverses for Stationary Sources

Principle - To aid in the representative measurement of pollutant emissions and/or total volumetric flow rate from a stationary source, a measurement site where the effluent stream is flowing in a known direction is selected and the cross-section of the stack is divided into a number of equal areas. A traverse point is then located within each of these equal areas. See Sampling Point Determination.

Applicability - This method is applicable to flowing gas streams in ducts, stacks and flues. This method cannot be used when: 1) flow is cyclonic or swirling 2) a stack is smaller than about 12 inches in diameter, or 0.071 cross-sectional area or 3) the measurement site is less than two stack or duct diameters downstream or less than a half diameters upstream from a flow disturbance. The procedures in this method were utilized in its entirety according to the procedures outlined in 40 CFR Part 60, Appendix A.

9.2 EPA Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate

Principle - Type S Pitot Tube - The average gas velocity in a stack is determined from the gas density and from measurement of the average velocity head with a Type S pitot tube.

Applicability - This method is applicable for measurement of the average velocity of a gas stream and for quantifying gas flow.

This procedure is not applicable at measurement sites which fail to meet the criteria of Method 1. This method cannot be used for direct measurement in cyclonic or swirling gas streams. The procedures in this method were utilized in its entirety according to the procedures outlined in 40 CFR Part 60, Appendix A.

9.3 Method 3 - Gas Analysis for the EPA Determination of Dry Molecular Weight

Principle - A gas sample is extracted from a stack by one of the following methods 1) Single-point grab sampling 2) single-point, integratd sampling or 3) multi-point, integrated sampling, the gas sample is analyzed for percent CO_2, percent O_2, and if necessary for CO. For dry molecular weight determination, either an Orsat or a Fyrite analyzer may be used for the analysis.

Applicability - This method is applicable for determining carbon dioxide and oxygen concentrations and dry molecular weight of a sample from a gas stream of a fossil fuel combustion process. The method may also be applicable to other processes where it has been determined that compounds other than CO_2, O_2, CO, and nitrogen are not present in concentrations sufficient to affect the results. The procedures in this method were utilized in its entirety according to the procedures outlined in 40 CFR Part 60, Appendix A.

9.4 EPA Method 4 - Determination of Moisture Content in Stack Gases

Principle - A gas sample is extracted at a constant rate from the source; moisture is removed from the sample stream and determined either volumetrically or gravimetrically.

Applicability - This method is applicable for determining the moisture content of stack gas. There are two procedures given to determine the moisture. The procedure for the reference method to determine the moisture content was used to calculate the emission data. The reference method was conducted simultaneously with the pollutant emission measurement run, calculation of percent isokinetic, pollutant emission rate, etc. for the run is based upon the results of the reference method or its equivalent. The procedures in this method were utilized in its entirety according to the procedures outlined in 40 CFR Part 60, Appendix A.

9.5 EPA Method 5 - Determination of Particulate Emissions from Stationary Sources

Principle - Particulate matter is withdrawn isokinetically from the source and collected on a glass fiber filter maintained at a temperature in the range of 120 - 248° For such other temperature as specified by an applicable subpart of the standards or approved by the Administrator, U.S. Environmental Protection Agency, for a particular application.

The particulate mass which includes any material that condenses at or above the filtration temperature, is determined gravimetrically after removal of uncombined water.

Applicability - This method is applicable for the determination of particulate emissions from stationary sources. The procedures in this method were utilized in its entirety according to the procedures outlined in 40 CFR Part 60, Appendix A.

Diagram of EPA Method 5 Sampling Train

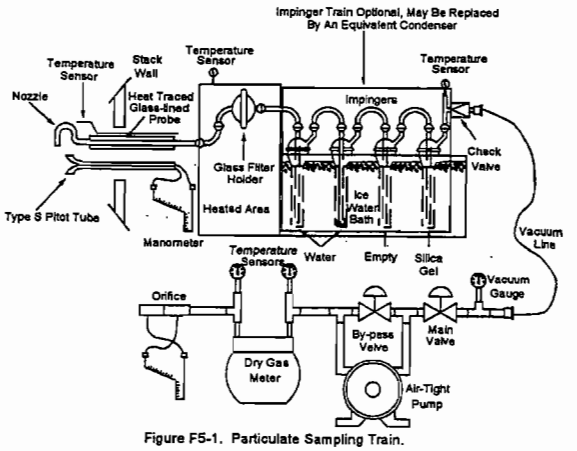


Figure F5-1. Particulate Sampling Train.

9.6 EPA Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources

Principle - The opacity of emissions from stationary sources is determined visually by a qualified observer.

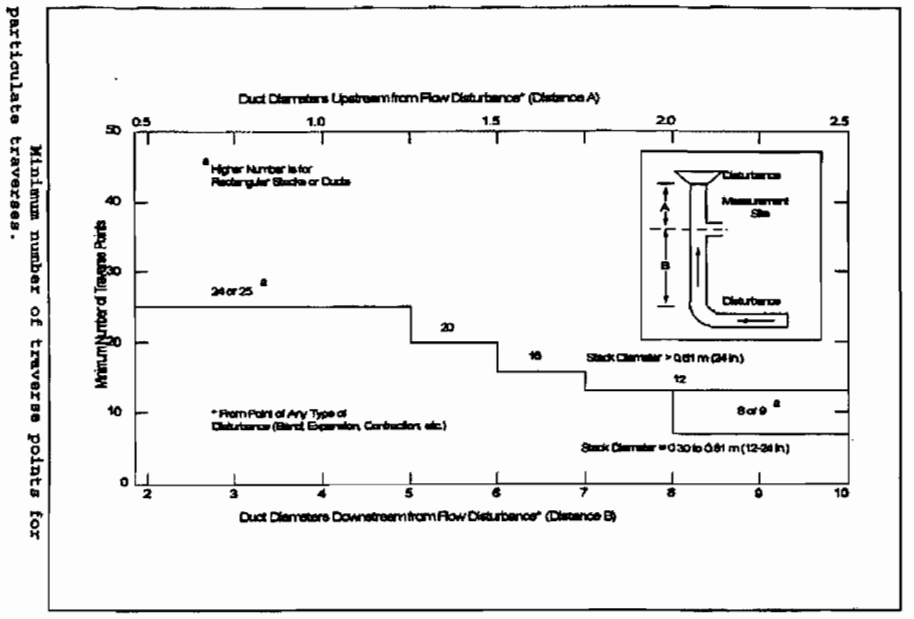
Applicability - This method is applicable for the determination of the opacity of emissions from stationary sources pursuant to 60.11(b) and for qualifying observers for visually determining the opacity of emissions.

9.7 EPA Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources

Principle - An integrated or continuous gas sample is extracted from a sampling point and analyzed for carbon monoxide (CO) content using a Luft-type nondispersive infrared analyzer or equivalent.

Applicability - This method is applicable for the determination of carbon monoxide emissions from stationary sources only when specified by the test procedures for determining compliance with new source performance standards. The procedures in this method were utilized in its entirety according to the procedures outlined in 40 CFR Part 60, Appendix A.

10.0 Sampling Point Determination
Minimum Number of Sampling Points



Per Particulate Traverse

Circular Stacks

The number of sampling points is selected according to the above diagram, with the number of points equaling the next higher multiple of four.

Rectangular Stacks

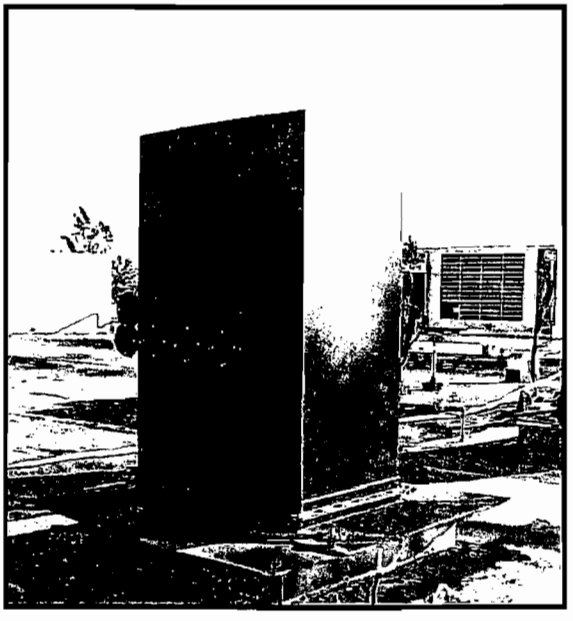
The number of sampling points is determined using the matrix below.

Number of Traverse Points	Subarea Layout Matrix
9	3 x 3
12	4 x 3
16	4 x 4
20	5 x 4
25	5 x 5
30	6 x5
36	6 x 6
42	7 x 6
49	7 x 7

10.1 Sampling Point Determination
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

Stack Configuration	Rectangular
Side 1 - with ports (inches)	24
Side 2 - (inches)	18.5
Equivalent Diameter	20.89
Distance A - Ports to Downstream Disturbance (inches)	24
Distance A - Ports to Downstream Disturbance (diameters)	1.15
Distance B - Ports to Upstream Disturbance (inches)	48
Distance B - Ports to Upstream Disturbance (diameters)	2.30
Number of Test Ports	6
Number of Sampling points per Traverse	5
Number of Points Sampled	25

Photograph of Stack



Traverse Point Location

Traverse Point No.	Inches to Stack Wall
1	1.9
2	5.6
3	9.3
4	13.0
5	16.7

11.0 Summary of Field and Laboratory Data
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

	Run 1	Run 2	Run 3
Date	3/3/2010	3/3/2010	3/3/2010
Start Time	10:10	11:45	14:30
Stop Time	11:15	12:49	15:37
CP	0.84	0.84	0.84
Y	0.9947	0.9947	0.9947
^Ha (inches H2O)	1.7304	1.7304	1.7304
Diameter of Nozzle (inches)	0.7503	0.7503	0.7503
Stack Diameter or Equivlant (inches)	20.89	20.89	20.89
Static Pressure (inches H2O)	-0.02	-0.02	-0.02
Barometric Pressure (inches Hg)	29.92	29.92	29.92
Test Time (minutes)	60	60	60
Meter Volume (cubic feet)	49.980	52.768	51.770
Square Root ^P (inches H2O)	0.145	0.154	0.153
Orifice Pressure ^H (inches H2O)	2.229	2.458	2.314
Average Meter Temperature (Deg. F)	67.2	75.1	72.2
Average Stack Temperature (Deg. F)	924.1	959.5	984.7
Particulate Sample Weight (grms)	0.0299	0.0243	0.0438
Water Collected (grms)	118.8	87.7	100.0
Percent CO2	4.5	4.5	4.5
Percent O2	14.2	14.1	14.0
Molecular Weight (lbs/lb Mole)	29.28	29.29	29.29
Nozzle Area (square feet)	0.00307	0.00307	0.00307

Attachment A - Field Data

Arlington Environmental Services, Inc.

Particulate Field Data

Plant	Guiding Light Cremations, LLC	Y_{qa}	1.0016
Report	2982-S-1	^Ha	1.7304
Date	03/03/10	Dn	0.7503
Operator	WA	Diameter (in.)	24 X 18.5
Time	10:10 - 11:15	Traverses X Points	4 X 6
K Factor	100.0	Static Pressure	-0.015
Assumed Moisture %	12	Barometric Pressure (in. Hg)	29.92
Dry Gas Meter No.	1	Test Time (min.)	60
Nozzle ID No.	#24	Metered Volume	49.98
Wet Bulb Temperature	NA	Avg. Sq Rt ^P	0.145
Post Leak Check	.004 cfm @ 20" Hg	Avg. ^H	2.229
Cp Factor	0.84	Avg. Meter Temp.	67.2
Y	0.9947	Avg. Stack Temp.	924.1

Traverse Point Number	Sampling Time (min.)	DG METER (cu.ft.) 360.063	Velocity Head (^P) in. H20	Pressure Orifice Meter (^H) in. H20	Meter Temperature (F)	Pump Vacuum (in. Hg.)	Impinger Temperature (F)	Filter Temperature (F)	Stack Temperature (F)
1	2.5	360.95	0.005	0.50	63	2.0	60	229	925
2	2.5	362.51	0.010	1.00	62	2.5	55	232	939
3	2.5	364.11	0.010	1.00	62	3.0	55	238	942
4	2.5	364.83	0.010	1.00	62	3.0	55	235	938
5	2.5	366.37	0.010	1.00	62	3.0	55	241	922
6	2.5	368.32	0.015	1.50	63	4.0	53	246	925
1	2.5	370.12	0.015	1.50	63	4.0	54	240	841
2	2.5	372.18	0.020	2.00	64	5.0	54	248	892
3	2.5	374.28	0.020	2.00	64	5.0	54	247	898
4	2.5	376.46	0.025	2.50	65	6.0	54	247	946
5	2.5	378.57	0.020	2.00	66	5.0	54	244	947
6	2.5	380.50	0.020	2.00	67	5.0	54	248	937
1	2.5	382.71	0.020	2.00	67	6.0	54	241	911
2	2.5	385.01	0.030	3.00	68	7.0	55	248	909
3	2.5	387.31	0.025	2.50	69	6.5	55	250	919
4	2.5	389.38	0.020	2.00	69	6.0	55	254	936
5	2.5	392.03	0.020	2.00	70	6.0	56	243	917
6	2.5	393.67	0.020	2.00	70	6.0	56	247	908
1	2.5	396.82	0.035	3.50	71	9.5	56	248	896
2	2.5	398.97	0.045	4.50	72	12.5	55	251	916
3	2.5	402.61	0.040	4.00	73	11.5	56	248	970
4	2.5	404.83	0.035	3.50	73	10.5	57	250	964
5	2.5	407.96	0.035	3.50	73	10.5	57	254	932
6	2.5	410.043	0.030	3.00	74	9.5	56	251	948

Arlington Environmental Services, Inc.

Particulate Field Data

Plant	Guiding Light Cremations, LLC	Y_{qa}	1.0034
Report	2982-S-2	^Ha	1.7304
Date	03/03/10	Dn	0.7503
Operator	WA	Diameter (in.)	24 X 18.5
Time	11:45 - 12:49	Traverses X Points	4 X 6
K Factor	100.0	Static Pressure	-0.015
Assumed Moisture %	12	Barometric Pressure (in. Hg)	29.92
Dry Gas Meter No.	1	Test Time (min.)	60
Nozzle ID No.	#24	Metered Volume	52.768
Wet Bulb Temperature	NA	Avg. Sq Rt ^P	0.154
Post Leak Check	.004 cfm @ 20" Hg	Avg. ^H	2.458
Cp Factor	0.84	Avg. Meter Temp.	75.1
Y	0.9947	Avg. Stack Temp.	959.5

Traverse Point Number	Sampling Time (min.)	DG METER (cu.ft.) 411.874	Velocity Head (^P) in. H20	Pressure Orifice Meter (^H) in. H20	Meter Temperature (F)	Pump Vacuum (in. Hg.)	Impinger Temperature (F)	Filter Temperature (F)	Stack Temperature (F)
1	2.5	412.93	0.030	3.00	72	3.5	56	242	934
2	2.5	415.29	0.040	4.00	72	6.0	52	239	941
3	2.5	418.42	0.040	4.00	72	6.0	52	254	949
4	2.5	421.23	0.035	3.50	72	6.0	52	246	945
5	2.5	424.16	0.035	3.50	72	6.5	51	248	925
6	2.5	427.02	0.035	3.50	72	6.5	51	249	921
1	2.5	428.73	0.035	3.50	73	7.0	51	245	913
2	2.5	432.38	0.035	3.50	74	7.0	53	249	928
3	2.5	435.12	0.025	2.50	75	6.0	50	244	966
4	2.5	437.32	0.020	2.00	75	5.5	50	247	985
5	2.5	439.42	0.020	2.00	75	5.5	50	245	940
6	2.5	441.52	0.025	2.50	75	6.0	50	240	905
1	2.5	443.70	0.020	2.00	75	6.0	52	246	895
2	2.5	445.87	0.025	2.50	76	6.5	51	249	996
3	2.5	447.97	0.020	2.00	76	6.5	52	248	1000
4	2.5	449.97	0.020	2.00	76	6.0	52	247	987
5	2.5	452.03	0.020	2.00	77	6.0	52	249	991
6	2.5	454.01	0.020	2.00	77	6.0	52	251	961
1	2.5	455.58	0.010	1.00	77	5.0	54	251	968
2	2.5	457.27	0.015	1.50	77	5.0	53	246	1019
3	2.5	459.06	0.015	1.50	78	6.0	53	251	1018
4	2.5	460.900	0.015	1.50	78	6.0	53	251	1001
5	2.5	463.02	0.020	2.00	78	6.5	53	247	988
6	2.5	464.642	0.015	1.50	78	6.5	52	253	952

Arlington Environmental Services, Inc.

Particulate Field Data

Plant	Guiding Light Cremations, LLC	Y_{qa}	0.9898
Report	2982-S-3	^Ha	1.7304
Date	03/03/10	Dn	0.7503
Operator	WA	Diameter (in.)	24 X 18.5
Time	14:30 - 15:37	Traverses X Points	4 X 6
K Factor	100.0	Static Pressure	-0.015
Assumed Moisture %	10	Barometric Pressure (in. Hg)	29.92
Dry Gas Meter No.	1	Test Time (min.)	60
Nozzle ID No.	#24	Metered Volume	51.77
Wet Bulb Temperature	NA	Avg. Sq Rt ^P	0.153
Post Leak Check	.004 cfm @ 20" Hg	Avg. ^H	2.314
Cp Factor	0.84	Avg. Meter Temp.	72.2
Y	0.9947	Avg. Stack Temp.	984.7

Traverse Point Number	Sampling Time (min.)	DG METER (cu.ft.) 465.872	Velocity Head (^P) in. H20	Pressure Orifice Meter (^H) in. H20	Meter Temperature (F)	Pump Vacuum (in. Hg.)	Impinger Temperature (F)	Filter Temperature (F)	Stack Temperature (F)
1	2.5	467.53	0.010	1.00	69	2.0	60	253	897
2	2.5	469.00	0.020	2.00	69	3.0	52	246	996
3	2.5	470.77	0.020	2.00	69	3.5	51	246	1001
4	2.5	472.64	0.015	1.50	69	3.5	51	249	994
5	2.5	474.10	0.015	1.50	69	4.0	52	243	973
6	2.5	475.82	0.015	1.50	69	4.0	51	247	945
1	2.5	478.01	0.015	1.50	69	4.0	51	246	979
2	2.5	479.58	0.020	2.00	71	4.0	52	245	1000
3	2.5	480.17	0.015	1.50	71	4.0	52	248	998
4	2.5	481.66	0.015	1.50	71	4.0	52	246	1021
5	2.5	483.52	0.015	1.50	71	4.0	53	247	976
6	2.5	485.28	0.015	1.50	72	4.0	53	247	991
1	2.5	487.65	0.025	2.50	72	6.0	53	248	933
2	2.5	490.41	0.035	3.50	73	7.5	52	251	950
3	2.5	492.98	0.025	2.50	73	6.5	52	250	1012
4	2.5	495.07	0.020	2.00	73	6.0	52	239	1014
5	2.5	497.43	0.020	2.00	73	6.0	52	249	1011
6	2.5	499.56	0.020	2.00	74	7.0	53	249	1035
1	2.5	503.31	0.045	4.50	75	12.0	55	251	952
2	2.5	505.81	0.050	5.00	76	13.5	53	248	1031
3	2.5	508.84	0.040	0.05	76	14.0	54	254	1029
4	2.5	511.48	0.040	4.00	76	12.5	54	253	1001
5	2.5	514.38	0.040	4.00	76	12.5	54	251	960
6	2.5	517.642	0.045	4.50	76	13.5	54	245	933

Arlington Environmental Services, Inc.

(863) 467-0555

VISIBLE EMISSION TEST

Method Used (Circle One): (Method 9) 203A 203B Report 2982-S

Company Name: Everglades Cremations

Facility Name: 2431 SW56 Terrace AIRS 0112701

Street Address: 2431 SW56 Terrace

City: West Park FL Zip 33023

Phone No.: (954) 381-8888

Process: Human Cremation Unit # 1 Operating Mode ~170 lbs

Control Equipment: AFter burners Operating Mode ~1300°F

Describe Emission Point: Rectangular Stack

Ht of Emis.Point: ~20' Ht Rel to Observer: ~15'

Distance to Emis. Pt: ~800' Direction to Emis. Pt (Degrees): ~336°

Verticle Angle to Obs.: <18° Direction to Obs. Pt. (Degrees): ~338°

Distance and Direction to Obs. Pt from Emission Pt: ~1' above

Describe Emissions: None

Emission Color: Clear Water Droplet Plume Attached Detached None X

Describe Plume Background: SKY

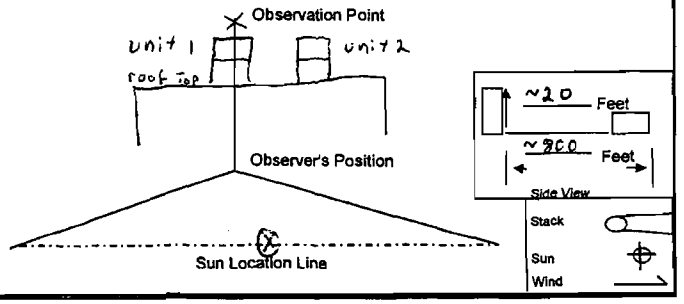
Background Color: Blue & White Sky Conditions: Scattered

Wind Speed: ~12-15 MPH Wind Direction: NW

Ambient Temp.: ~58°F Wet Bulb Temp.: — % RH: —

Source Layout Sketch

Draw North Arrow ☐ IN ☐ MN



Latitude	Longitude	Declination

Comments:

Observation Date	Start Time	Stop Time
3-4-10	0930	1030

Min / Sec	0	15	30	45	Min / Sec	0	15	30	45
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Number of Readings Above % were

Average Opacity for Highest 6 Min Period: 0

Range of opacity Readings Min 0 Max 0

Average Opacity for 2nd Highest 6 Min Period: 0

Observers Name (Print): Steve Webb

Observers Signature: Stephen L. Webb Date: 3-4-10

Organization: Arlington Environmental Services, Inc.

Certified By: Whitlow Enterprises Date: 1/15/10

Whitlow Enterprises, LLC

www.smokeschool.net

Certifies that

Stephen Webb of Coastal Air Consulting

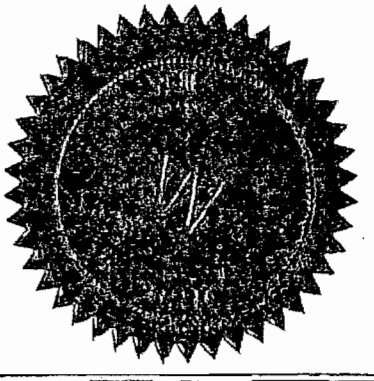
Has passed the certification test required by EPA Method 9

40 CFR 60 Appendix A and is qualified as a visible emissions evaluator.

Certification Date: 1/15/2010 Location: Tampa/Mulberry, FL

George Whitlow

President



TMFL011510-32

Attachment B - Laboratory Data

Particulate Laboratory Data
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

Run 1

Filter Number	1480	
	Final Weight	0.3864 grams
	Tare Weight	0.3725 grams
	Difference	0.0139 grams
Beaker Number	1A	
	Final Weight	109.3286 grams
	Tare Weight	109.3119 grams
	Difference	0.0167 grams
Filter Blank Number	1483	
	Final Weight	0.3700 grams
	Tare Weight	0.3699 grams
	Difference	0.0001 grams
Wash Down Blank		
	Volume of Rinse	75 mls
	Solution of Residue	0.00000784 grams/mls
	Total Residue	0.000588 grams/mls

Total Particulate Weight **0.0299 grams**

Water Collected

Final Impinger Water	308 MLS
Initial Impinger Water	200 MLS
Final Silica Weight	211.0 GRAMS
Silica Tare Weight	200.0 GRAMS

Total Water Collected **118.8 GRAMS**

Analyst _____

Particulate Laboratory Data
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

Run 2

Filter Number	1481	
	Final Weight	0.3919 grams
	Tare Weight	0.3738 grams
	Difference	0.0181 grams
Beaker Number	2A	
	Final Weight	107.1881 grams
	Tare Weight	107.1811 grams
	Difference	0.0070 grams
Filter Blank Number	1483	
	Final Weight	0.3700 grams
	Tare Weight	0.3699 grams
	Difference	0.0001 grams
Wash Down Blank		
	Volume of Rinse	90 mls
	Solution Residue	0.00000784 grams/ml
	Total Residue	0.0007056 grams/ml

Total Particulate Weight **0.0243 grams**

Water Collected

Final Impinger Water	282 MLS
Initial Impinger Water	200 MLS
Final Silica Weight	205.8 GRAMS
Silica Tare Weight	200.0 GRAMS

Total Water Collected **87.7 grams**

Analyst _____

Particulate Laboratory Data
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

Run 3

Filter Number	1482	
	Final Weight	0.4090 grams
	Tare Weight	0.3730 grams
	Difference	0.0360 grams
Beaker Number	3A	
	Final Weight	108.3692 grams
	Tare Weight	108.3608 grams
	Difference	0.0084 grams
Filter Blank Number	1483	
	Final Weight	0.3700 grams
	Tare Weight	0.3699 grams
	Difference	0.0001 grams
Wash Down Blank		
	Volume of Rinse	65 mls.
	Solution Residue	0.00000784 grams/ml.
	Total Residue	0.0005096 grams

Total Particulate Weight **0.0438 grams**

Water Collected

	Final Impinger Water	296 mls.
	Initial Impinger Water	200 mls.
	Final Silica Weight	204.2 grams
	Silica Tare Weight	200.0 grams

Total Water Collected **100.0 grams**

Analyst _____

Attachment C - Process Data

Emission Control Device and Process Data

Company Guiding Light Creations

Installation Unit # 1

Date 3-3-10 Report No. 2982-S

Type of Installation Crematory

Type of Material Processed Human Remains

Type(s) of Fuel Used Natural Gas

Type of Pollution Control System Afterburner

General Condition of Control Equipment Normal

Run No.	1	2	3
Start Time	10:10	11:45	14:30
Stop Time	11:15	12:49	15:37
Fuel Used	NG	NG	NG
Scrubber Water Flow Rate (GPM)	NA	NA	NA
Pressure Drop (in. H2O)	NA	NA	NA
Total Operating temp. °F	1680	1710	1720
Process Rate (s/Hr.)	— 175 —		175
Percent Recycle	NA	NA	NA

Signature W. Arlington Title

Name

(Please Print)

MARC 500

Attachment D - Calculations for Run 1

CALCULATIONS FOR RUN 1
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

STACK AREA

(SIDE 1) X (SIDE 2) / 144

24.00 X 18.50 / 144

3.08 SQ.FT.

STACK PRESSURE

BAROMETRIC PRESSURE + (STATIC PRESSURE/ 13.6)

29.92 + (-0.02 /13.6)

29.92 IN.HG

METER PRESSURE

BAROMETRIC PRESSURE + (ORIFICE PRESURE/13.6)

29.92 + (2.23 / 13.6)

30.08 IN.Hg

SAMPLE VOLUME

17.64 X (Y) X METER VOLUME X METER PRESSURE / (METER TEMP. + 460)

17.64 X 0.9947 X 49.980 X 30.08 / (67.2 + 460)

50.049 STD.CU.FT.

WATER VAPOR VOLUME

.04715 X WATER COLLECTED

0.04715 X 118.8

5.60 STD.CU.FT.

SAMPLE MOISTURE

100 X WATER VAPOR VOLUME / (WATER VAPOR VOLUME + SAMPLE VOLUME)

100 X 5.60 / (5.60 + 50.049)

10.07 %

SATURATION MOISTURE

100 X (VAPOR PRESSURE @ STACK TEMP. / STACK PRESSURE)

100 X (######### / 29.92)

100.00 %

STACK MOISTURE FRACTION

(THE LESSER OF SAMPLE MOISTURE OR SATURATION MOISTURE) / 100

0.101

DRY MOLECULAR WEIGHT OF STACK GAS

(.28 X (100-%N2)) + (.44 X %CO2) + (.32 X %O2)

(.28 X (100 - (4.47 + 14.20) + (.44) 4.5 + (.32) 14.20)

29.28

CALCULATIONS FOR RUN 1
Guiding Light Cremations, LLC
Unit #1
Report 2982-S

MOLECULAR WEIGHT OF STACK GAS

MOLECULAR WEIGHT X (1 - MOISTURE) + (18 X MOISTURE)

29.28 X (1 - 0.101) + (18 X 0.101)

28.15

STACK VELOCITY

85.49 X CP X 60 X SQ.(^P) X SQ.(STACK TEMP + 460)/SQ.(STACK PRESSURE X MOLECULAR WT.)

85.49 X 0.840 X 60 X 0.145 X SQ.(924.1 + 460) / SQR(29.92 X 28.15

802 FPM

VOLUMETRIC FLOW RATE (ACFM)

STACK AREA X STACK VELOCITY

3.08 X 802

2472 ACFM

VOLUMETRIC FLOW RATE (SCFM) DRY

17.64 X (ACFM) X STACK PRESSURE X (1-MOISTURE) / (STACK TEMP. + 460)

17.64 X 2472 X 29.92 X (1 - 0.101) / (924.1 + 460)

848 SCFM (DRY)

CONCENTRATION (gr/dscf)

Total Particulate Weight X 15.43 / Sample Volume

0.0299 X 15.43 / 50.05

0.0092

CONCENTRATION@7% O2 (gr/dscf)

Concentration X 13.9 / (20.9 - %o2)

0.0092 X 13.9 / (20.9 14.20)

0.0191

MASS EMISSION RATE (LBS./HR.)

CONCENTRATION X (SCFM- DRY) X 60 / 7000

0.0092 X 848 X 60 / 7000

0.07 LBS/HR

PERCENT ISOKINETIC

.0945 X (STACK TEMP. + 460) X SAMPLE VOLUME X 60

. (STACK PRES. X VELOCITY X NOZZLE AREA X TEST TIME X (1-MOISTURE))

$$\frac{0.0945 \times (924.08 + 460) \times 50.05 \times 60}{29.92 \times 802 \times 0.00307 \times 60.00 \times (1- 0.101)}$$

98.84 %

RESIDENCE TIME CALCULATION

CORRECTION FOR QUENCHED AIR AT OUTLET

PLANT:	Guiding Light		
SOURCE:	Unit #1		
LOCATION:			
DATE:			
STACK PRESSURE:	29.92		
CHARGE RATE:			

SOURCE PARAMETERS

	OUTLET STACK	**AMBIENT AIR**	**SECONDARY CHAMBER**
TEMPERATURE,F	1062	65	1620
AIR FLOW,ACFMD	2468		
AIR FLOW,ACFM	2563		
H2O FLOW,ACFM	95		
PRESSURE,PSI	14.70	14.70	14.70
AIR ENTHALPY,BTU/LB	375.0	125.4	527.0
H2O ENTHALPY,BTU/LB	708.8	231.2	1014.4
SCC VOLUME,CFT			71
HUMIDITY RATIO		0.02	

EQUATIONS

1. MASS = PVM/RT

M = MOLECULAR WEIGHT

R = 1545 ft-lbf/lbm-mol-R

$$\text{MASS (lbm/min)} = \frac{(\text{psia})(\text{ACFMD})(\text{lbm/lbm-mol}) \times (144\ \text{sq.in/sq.ft})}{(1545\ \text{ft-lbf/lbm-mol} \times \text{R})(\text{Temp. R})}$$

2. HEAT LOSS FROM SCC = HEAT GAINED BY AMBIENT AIR

M(AIR,SCC) = M(AIR,STACK) - (M(AIR,AMB.)

M(H2O,SCC) = M(H2O,STACK) - M(H2O,AMB.)

OUTLET FLOWS

M(DRY AIR) =	64.36	lb/min
M(H2O) =	1.54	lb/min
M(TOTAL) =	65.90	lb/min

RESIDENCE TIME CALCULATION

CORRECTION FOR QUENCHED AIR AT OUTLET				
SCC DRY AIR				
(M x ENTHALPY CHANGE)scc = (M x ENTHALPY CHANGE)amb.				
H(Mscc) =		151.97	BTU/lbm	
H(Mamb) =		249.6	BTU/lbm	
M(amb) =		0.609	x M(scc)	
M(scc) + M(amb) =		64.362	lb/min	
M(scc)AIR =		40.005	lb/min	
SCC H2O				
M(scc)H2O + M(amb)H2O = M(outlet)H2O				
M(amb.) H2O =		0.02	lb/lb dry air	
M(amb.) AIR =		24.36	lb/min	
M(amb.) H2O =		0.49	lb/min	
M(scc) H2O =		1.05	lb/min	
SCC VOLUMETRIC FLOW				
V = MRT/PM	@	1620	F	
		14.70	psi	
AIR:				
	V =	2096.4	ACFM	
H2O:				
	V =	88.7	ACFM	
TOTAL SCC:				
	V =	2185.2	ACFM	
SCC RESIDENCE TIME				
RESIDENCE TIME =		1.95	SECONDS	

Attachment E - Calibration Data

ANNUAL METER CALIBRATION — METER NO. 002047 — ORIFICE SET NO. JC40-73

DATE	9/20/2009	Y=	0.9947	MAX % VARIATION	1.8562%	PASS	
BAROMETRIC PRESSURE	29.98	^Ha=	1.7304	MAX % VARIATION	1.2487%	PASS	

CRITICAL ORIFICE DATA

ORIFICE SERIAL NO.	ORIFICE K' FACTOR	ACTUAL VACUUM	^H (IN H2O)	TIME (MIN.)	AMBIENT TEMP INITIAL	AMBIENT TEMP. FINAL	METER TEMP. INITIAL	METER TEMP. FINAL	METER READING INITIAL	METER READING FINAL	VM (CU.FT.)	VM CORRECTE	Vcr STD	Vcr NOMINAL	Y	VARIATION	^H (IN. H2O)	VARIATION
40	0.2435	24.0	0.31	10	83	83	82	83	719.500	722.767	3.2670	3.1872	3.1328	3.2166	0.9829	0.0015	1.7327	0.0037
40	0.2435	24.0	0.31	10	83	83	83	84	722.767	726.050	3.2830	3.1969	3.1328	3.2166	0.9799	-0.0015	1.7295	0.0005
40	0.2435	24.0	0.31	10	83	83	85	85	726.050	729.337	3.2870	3.1920	3.1328	3.2166	0.9814	0.0000	1.7247	-0.0042
AVERAGE															0.9814	0.0186	1.7290	0.0008
48	0.3557	22.5	0.66	10	84	84	86	86	730.400	735.138	4.7380	4.5966	4.5721	4.7031	0.9947	-0.0030	1.7208	0.0005
48	0.3557	22.5	0.66	10	84	84	86	87	735.138	739.858	4.7200	4.5749	4.5721	4.7031	0.9994	0.0017	1.7193	-0.0011
48	0.3557	22.0	0.66	10	85	85	87	87	739.858	744.580	4.7220	4.5727	4.5679	4.7074	0.9990	0.0013	1.7208	0.0005
AVERAGE															0.9977	0.0023	1.7203	0.0058
55	0.4616	19.5	1.15	10	86	86	88	89	745.400	751.583	6.1830	5.9783	5.9224	6.1145	0.9907	-0.0057	1.7788	0.0268
55	0.4616	18.0	1.15	10	87	87	90	90	751.583	757.678	6.0950	5.8771	5.9170	6.1201	1.0068	0.0105	1.7772	0.0252
55	0.4616	18.0	1.10	10	88	88	91	91	757.678	763.873	6.1950	5.9820	5.9116	6.1257	0.9916	-0.0048	1.7000	-0.0520
AVERAGE															0.9963	0.0037	1.7520	0.0125
63	0.5916	20.5	1.85	10	88	88	91	92	765.300	773.178	7.8780	7.5887	7.5765	7.8509	0.9984	0.0020	1.7390	0.0021
63	0.5916	20.5	1.85	10	88	88	92	92	773.178	781.096	7.9180	7.6203	7.5765	7.8509	0.9943	-0.0021	1.7375	0.0005
63	0.5916	20.5	1.85	10	88	88	93	93	781.096	789.010	7.9140	7.6027	7.5765	7.8509	0.9966	0.0002	1.7343	-0.0026
AVERAGE															0.9964	0.0036	1.7369	0.0038
73	0.8234	17.5	3.55	10	88	88	93	94	790.000	800.963	10.9630	10.5659	10.5451	10.9270	0.9980	-0.0039	1.7164	0.0026
73	0.8234	17.5	3.55	10	88	88	94	95	800.963	811.885	10.9220	10.5074	10.5451	10.9270	1.0036	0.0017	1.7133	-0.0005
73	0.8234	17.5	3.55	10	88	88	95	95	811.885	822.812	10.9270	10.5028	10.5451	10.9270	1.0040	0.0021	1.7118	-0.0021
AVERAGE															1.0019	0.0019	1.7139	0.0098

SEMI ANNUAL CALIBRATION — DATE 3/21/2009 — BAROMETRIC PRESSURE 30.12

ORIFICE SERIAL NO.	ORIFICE K' FACTOR	ACTUAL VACUUM	^H (IN H2O)	TIME (MIN.)	AMBIENT TEMP INITIAL	AMBIENT TEMP. FINAL	METER TEMP. INITIAL	METER TEMP. FINAL	METER READING INITIAL	METER READING FINAL	VM (CU.FT.)	VM CORRECTE	Vcr STD	Vcr NOMINAL	Y	VARIATION	^H (IN. H2O)	VARIATION
55	0.4616	21.0	1.15	10	76	75	82	81	679.000	685.182	6.1820	6.0828	6.0082	6.0555	0.9877	-0.0086	1.7590	-0.0011
55	0.4616	21.0	1.15	10	75	75	81	80	685.182	691.342	6.1600	6.0723	6.0110	6.0526	0.9899	-0.0064	1.7606	0.0005
55	0.4616	21.0	1.15	10	75	74	80	80	691.342	697.478	6.1360	6.0543	6.0138	6.0498	0.9933	-0.0030	1.7608	0.0005
AVERAGE															0.9903	-0.0060	1.7600	0.0171
																PASS		PASS

METER COMPARISON CHECK (Yqa) — Y_{qa} = (O / Vm) X sqr(.319 x Tm X 29 / (^Ha x (Pb + (Havg / 13.6) x Md)) X sqq ^H avg

	Run 1	Run 2	Run 3	Average
Y_{qa} =	1.0016	1.0034	0.9898	0.9983

THERMOCOUPLE CALIBRATION

DATE 9/20/2009

	TC-1 (DEG F)	ASTM THERMOMETER (DEG F)
ICE	31	32
BOILING H2O	211	212
OIL	354	352

NOZZLE CALIBRATION

DATE 3/3/2010

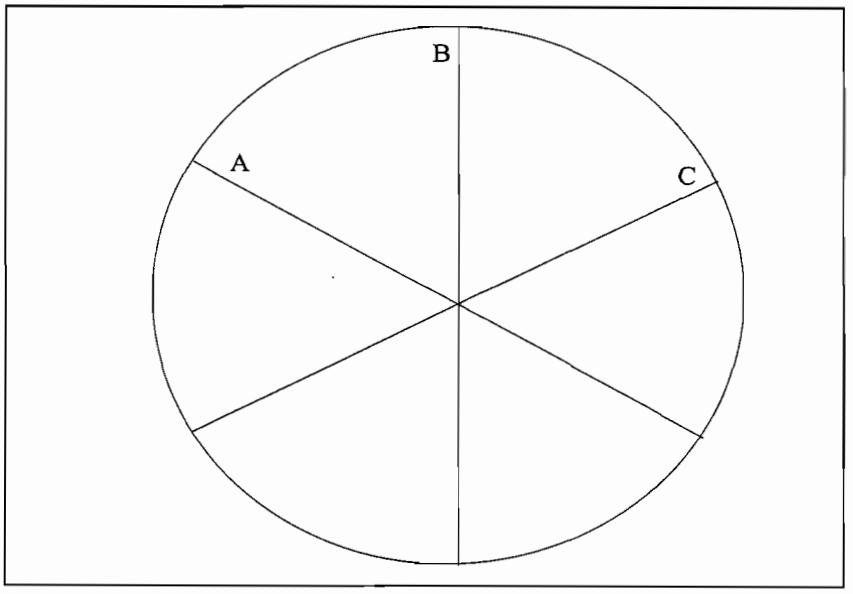
READINGS IN (IN.)				AVERAGE
#24	0.750	0.750	0.751	0.7503

PITOT TUBE CP=.84 ACCORDING TO DESIGN SPECIFICATIONS

Nozzle Calibration

Nozzle ID #24

A = 0.750
B = 0.750
C = 0.751
Average 0.7503

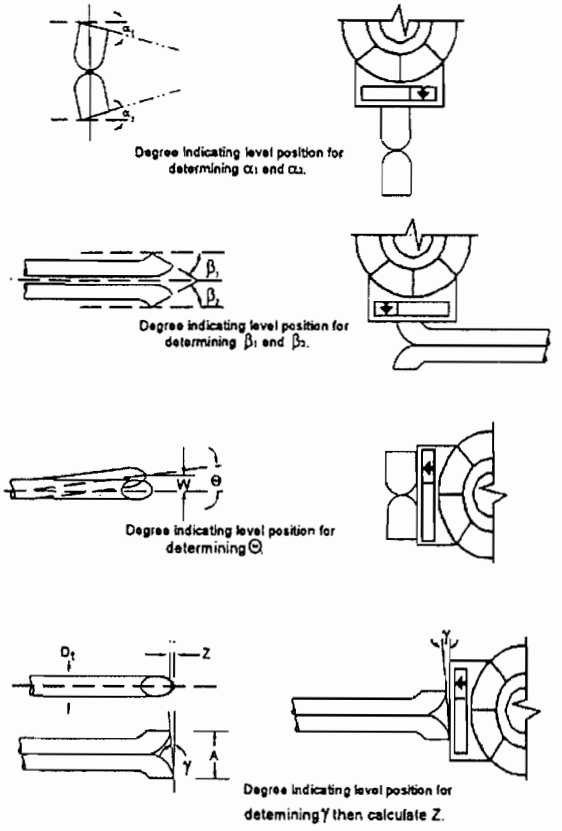


Calibration Date 3/3/2010

Calibrated by

PITOT CALIBRATION

(Type S Pitot Tube Inspection)



Level and Perpendicular?	Yes
Obstruction?	No
Damaged?	No
α_1 ($-10° \leq \alpha_1 \leq +10°$)	2
α_2 ($-10° \leq \alpha_2 \leq +10°$)	0
β_1 ($-5° \leq \beta_1 \leq +5°$)	1
β_2 ($-5° \leq \beta_2 \leq +5°$)	1
Y	1
θ	-2
$z = A \tan \gamma$ ($\leq 0.125°$)	0.017
$w = A \tan \theta$ ($\leq 0.03125°$)	-0.034
D_t ($3/16" \leq D_t \leq +3/8"$)	0.375
A	0.961
$A/2\,D_t$ ($1.05 \leq P_A / D_t \leq 1.51$)	1.281

Certification

I hereby certify that type S pitot tube ID# P-5AC meets or exceeds all specifications, critera and applicable design features, and is hereby assigned a pitot tube calibration factor of 0.84.

Certified by: _____ Date: 9/20/09

Guiding Light Cremations, LLC Unit 1

DATE: 3/3/2010
RUN: 1
UNIT: 1

AVG. ADJUSTED CO ppmvd @ 7% O2	24.04
CORRECTED O2 %	14.15
CORRECTED CO2 %	4.47
CORRECTED CO ppmvd	11.66

ANALYZER RESPONSE, SYSTEM BIAS AND SYSTEM DRIFT DATA

RANGE SETTING	CAL GASES	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFFERENCE PPM	% SPAN	ANALYZER PRETEST VALUE	% SPAN	ANALYZER POSTTEST VALUE	% SPAN	% DRIFT	ANALYZER SERIAL #
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25	% O2	12.04	12.00	-0.04	-0.18	12.00	0.00	12.00	0.00	0.00	01420B153
		22.62	22.60	-0.02	-0.09						
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
20	% CO2	9.62	9.60	-0.02	-0.12	9.60	0.00	9.60	0.00	0.00	01410/B139
		17.27	17.30	0.03	0.17						
		0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.0	0.0	
100	PPM CO	48.5	48.2	-0.30	-0.3	48.30	0.1	48.10	-0.1	-0.2	48C-68845-361
		102.00	103.10	1.10	1.1						

UNCORRECTED RAW DATA

DATE & TIME	O2 %	CO2 %	CO PPM
10:10	15.12	3.52	1.95
10:11	15.23	3.28	2.00
10:12	15.63	3.87	2.95
10:13	14.27	5.08	4.30
10:14	13.85	4.88	5.15
10:15	14.33	4.43	5.00
10:16	14.46	4.40	4.80
10:17	14.41	4.41	4.20
10:18	14.44	4.32	3.78
10:19	14.48	4.29	3.55
10:20	14.45	4.29	3.50
10:21	14.47	4.23	3.48
10:22	14.51	4.20	3.55
10:23	14.54	4.11	3.65
10:24	14.64	4.04	3.60
10:25	14.67	4.01	3.65
10:26	14.73	3.93	3.65
10:27	14.79	3.88	3.68
10:28	14.83	3.87	3.63
10:29	14.83	3.87	3.68
10:30	14.83	3.85	3.83
10:31	14.84	3.85	3.80
10:32	14.89	3.78	3.80
10:33	14.95	3.74	3.80
10:34	14.99	3.72	3.85
10:35	14.96	3.80	3.88
10:36	14.89	4.02	3.78
10:37	14.12	4.69	3.95
10:38	13.75	4.66	4.35
10:39	13.79	4.62	4.58
10:40	13.81	4.57	4.73
10:41	13.86	4.56	4.50
10:42	13.81	4.57	4.55
10:43	13.84	4.53	4.45
10:44	13.84	4.55	4.63
10:45	13.83	4.57	4.53
10:46	13.79	4.58	4.60
10:47	13.80	4.57	4.50
10:48	13.79	4.56	4.58
10:49	13.79	4.58	4.68
10:50	13.81	4.49	4.75
10:51	14.06	4.41	4.38
10:52	13.94	4.46	4.23
10:53	13.93	4.51	4.10
10:54	13.89	4.52	4.30
10:55	13.84	4.54	4.30
10:56	14.33	4.19	4.43
10:57	13.68	5.16	4.58
10:58	13.17	4.82	6.25
10:59	14.79	4.31	89.75
11:00	13.49	5.13	59.45
11:01	13.35	5.13	8.10
11:02	13.86	4.59	61.50
11:03	12.78	5.84	44.08
11:04	11.85	5.62	3.70
11:05	13.96	4.79	66.43
11:06	12.40	5.85	28.08
11:07	11.95	5.36	3.20
11:08	14.14	4.86	86.33
11:09	12.36	5.78	44.80

MEAN ANALYZER VALUES

Avg. % O2	14.11
Avg. % CO2	4.46
Avg. CO ppmvd	11.59

Guiding Light Cremations Unit 1

DATE: 3/3/2010
RUN: 2
UNIT: 1

AVG. ADJUSTED CO ppmvd @ 7% O2	3.12
CORRECTED O2 %	14.11
CORRECTED CO2 %	4.53
CORRECTED CO ppmvd	1.52

ANALYZER RESPONSE, SYSTEM BIAS AND SYSTEM DRIFT DATA

RANGE SETTING	CAL GASES	CERTIFIED GAS. VALUE	ANALYZER VALUE	DIFFERENCE PPM	% SPAN	ANALYZER PRETEST VALUE	% SPAN	ANALYZER POSTTEST VALUE	% SPAN	% DRIFT	ANALYZER SERIAL #
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25	% O2	12.04	12.00	-0.04	-0.18	12.00	0.00	12.00	0.00	0.00	01420B153
		22.62	22.60	-0.02	-0.09						
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
20	% CO2	9.62	9.60	-0.02	-0.12	9.60	0.00	9.60	0.00	0.00	01410/B139
		17.27	17.30	0.03	0.17						
		0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.0	0.0	
50	PPM CO	48.50	48.20	-0.30	-0.3	48.10	-0.1	48.00	-0.2	-0.1	48C-68845-361
		102.00	103.10	1.10	1.1						

UNCORRECTED RAW DATA

DATE & TIME	O2 %	CO2 %	CO PPM
11:45	13.78	4.69	1.00
11:46	13.69	4.77	0.90
11:47	13.63	4.81	0.85
11:48	13.56	4.86	0.95
11:49	13.53	4.86	0.85
11:50	13.53	4.88	0.95
11:51	13.49	4.90	0.90
11:52	13.48	4.92	0.90
11:53	13.48	4.89	1.00
11:54	13.53	4.86	1.00
11:55	13.56	4.85	0.95
11:56	13.52	4.87	1.05
11:57	13.52	4.86	1.05
11:58	13.55	4.85	1.10
11:59	13.55	4.84	1.10
12:00	13.53	4.87	1.15
12:01	13.66	4.19	1.35
12:02	15.17	4.20	2.20
12:03	14.20	4.49	1.40
12:04	14.04	4.59	1.05
12:05	13.96	4.61	1.00
12:06	13.98	4.60	1.00
12:07	13.98	4.60	0.90
12:08	13.96	4.60	1.00
12:09	14.03	4.55	0.95
12:10	14.06	4.53	1.00
12:11	14.09	4.52	1.00
12:12	14.07	4.53	0.95
12:13	14.06	4.54	1.05
12:14	14.04	4.54	1.05
12:15	14.03	4.57	0.95
12:16	13.96	4.58	1.15
12:17	14.24	4.24	1.10
12:18	14.34	4.49	1.40
12:19	14.06	4.53	1.60
12:20	14.03	4.56	1.50
12:21	14.06	4.29	1.45
12:22	14.76	4.27	1.25
12:23	14.14	4.53	1.25
12:24	14.06	4.51	1.20
12:25	14.04	4.53	1.25
12:26	14.63	3.95	1.70
12:27	14.53	4.46	1.90
12:28	14.09	4.51	1.25
12:29	14.08	4.51	1.15
12:30	14.10	4.21	1.20
12:31	14.99	4.17	2.00
12:32	14.21	4.49	1.15
12:33	14.06	4.53	1.10
12:34	14.02	4.39	1.30
12:35	15.11	3.89	5.85
12:36	14.36	4.49	2.70
12:37	14.07	4.51	1.10
12:38	14.06	4.45	1.15
12:39	15.02	3.77	3.15
12:40	14.57	4.37	3.00
12:41	14.21	4.39	2.05
12:42	14.21	4.38	1.75
12:43	14.97	3.67	4.10
12:44	14.81	4.32	7.15

MEAN ANALYZER VALUES

Avg. % O2	14.07
Avg. % CO2	4.52
Avg. CO ppmvd	1.51

Guiding Light Cremations Unit 1

DATE: 3/3/2010
RUN: 3
UNIT: 1

AVG. ADJUSTED CO ppmvd @ 7% O2	3.78
CORRECTED O2 %	14.00
CORRECTED CO2 %	4.54
CORRECTED CO ppmvd	1.88

ANALYZER RESPONSE, SYSTEM BIAS AND SYSTEM DRIFT DATA

RANGE SETTING	CAL GASES	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFFERENCE PPM	% SPAN	ANALYZER PRETEST VALUE	% SPAN	ANALYZER POSTTEST VALUE	% SPAN	% DRIFT	ANALYZER SERIAL #
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25	% O2	12.04	12.00	-0.04	-0.18	12.00	0.00	12.00	0.00	0.00	01420B153
		22.62	22.60	-0.02	-0.09						
		0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.58	0.58	
20	% CO2	9.62	9.60	-0.02	-0.12	9.60	0.00	9.60	0.00	0.00	01410/B139
		17.27	17.30	0.03	0.17						
		0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.0	0.0	
50	PPM CO	48.50	48.20	-0.30	-0.3	48.00	-0.2	47.80	-0.4	-0.2	48C-68845-361
		102.00	103.10	1.10	1.1						

UNCORRECTED RAW DATA

DATE & TIME	O2 %	CO2 %	CO PPM
14:30	13.17	4.69	0.65
14:31	11.95	4.77	0.63
14:32	13.99	4.81	0.79
14:33	12.03	4.86	0.85
14:34	13.18	4.86	0.25
14:35	13.96	4.88	0.45
14:36	13.93	4.90	0.55
14:37	14.03	4.92	1.50
14:38	12.54	4.89	1.56
14:39	12.54	4.86	1.45
14:40	14.31	4.85	1.35
14:41	13.93	4.87	1.05
14:42	13.83	4.86	0.80
14:43	13.34	4.85	0.55
14:44	13.69	4.84	0.40
14:45	14.54	4.87	0.05
14:46	13.83	4.19	0.15
14:47	13.43	4.62	0.05
14:48	13.81	4.49	0.10
14:49	14.04	4.59	3.95
14:50	13.96	4.61	10.10
14:51	13.98	4.61	12.50
14:52	13.99	4.41	0.90
14:53	13.96	4.59	0.10
14:54	14.00	4.56	0.05
14:55	14.06	4.56	0.00
14:56	14.08	4.52	0.00
14:57	14.07	4.53	0.00
14:58	14.06	4.54	0.35
14:59	14.04	4.54	0.95
15:00	14.00	4.57	2.40
15:01	13.96	4.58	1.20
15:02	14.24	4.24	0.80
15:03	14.34	4.49	0.30
15:04	14.06	4.53	0.00
15:05	14.01	4.56	0.00
15:06	14.06	4.29	0.00
15:07	14.76	4.27	8.65
15:08	14.13	4.53	2.80
15:09	14.04	4.51	0.15
15:10	14.04	4.53	1.25
15:11	14.56	4.50	1.70
15:12	14.53	4.46	1.90
15:13	14.09	4.51	1.25
15:14	14.08	4.51	1.15
15:15	14.09	4.21	1.20
15:16	14.99	4.17	2.25
15:17	14.21	4.49	2.55
15:18	14.06	4.53	1.10
15:19	14.02	4.39	1.30
15:20	15.11	3.89	6.49
15:21	14.38	4.49	2.73
15:22	14.07	4.51	2.10
15:23	14.06	4.54	1.22
15:24	14.02	4.38	3.42
15:25	14.17	4.37	3.25
15:26	14.21	4.39	2.21
15:27	14.21	4.38	1.98
15:28	14.17	4.27	5.85
15:29	14.11	4.32	8.32

MEAN ANALYZER VALUES

Avg. % O2	13.95
Avg. % CO2	4.56
Avg. CO ppmvd	1.86

Liquid Technology Corporation

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer	Coastal Air Consulting (Deland, Florida)
Date	July 22, 2009
Delivery Receipt	DR-25422
Gas Standard	11-13 ppm Nitric Oxide, 23-27 ppm Carbon Monoxide/Nitrogen
Final Analysis Date	July 22, 2009
Expiration Date	July 22, 2011 ~ **DO NOT USE BELOW 150 psig**

Analytical Data:
EPA Protocol, Section No. 2.2, Procedure G-1.

Reported Concentrations:

Nitric Oxide: 11.8 ppm +/- 0.11 ppm

Carbon Monoxide: 25.7 ppm +/- 0.25 ppm

Nitrogen: Balance

Total NOx: 11.8 ppm

** Total NOx for Reference Use Only **

Reference Standards

SRM GMIS	GMIS/GMIS	GMIS/GMIS
Cylinder Number:	CC-165557/CC-117924	CC-184197/CC-158976
Concentration:	5.22 ppm NO/19.48 ppm NO	10.07 ppm CO/25.1 ppm CO
Expiration Date:	12/03/10 - 12/11/10	06/15/10 - 08/04/10

Certification Instrumentation

Component:	Nitric Oxide	Carbon Monoxide
Make/Model:	Nicolet NEXUS 470	Nicolet-NEXUS 470
Serial Number:	AEP99000154	AEP99000154
Principal of Measurement:	FTIR	FTIR
Last Calibration:	July 04, 2009	July 02, 2009

Cylinder Data

Cylinder Number:	EB-0016054	Cylinder Volume:	140 Cubic Feet
Cylinder Outlet:	CGA 660	Cylinder Pressure:	2000 psig, 70°F
Expiration Date:	July 22, 2011		

Analytical Uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by: Mike Duncan

Mike Duncan

Unmatched Excellence

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~ www.liquidtechcorp.com ~

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Certificate of Analysis

- EPA PROTOCOL GAS -

Customer	Coastal Air Consulting (Deland, Florida)
Date	October 27, 2009
Delivery Receipt	DR-26491
Gas Standard	22-25 ppm NO, 45-50 ppm CO/Nitrogen - EPA PROTOCOL
Final Analysis Date	October 20, 2009
Expiration Date	October 20, 2011
Components	Nitric Oxide, Carbon Monoxide
Balance Gas	Nitrogen

Analytical Data: **DO NOT USE BELOW 150 psig**

EPA Protocol, Section No. 2.2, Procedure G-1

Reported Concentrations

Nitric Oxide: 22.9 ppm +/- 0.22 ppm

Carbon Monoxide: 48.5 ppm +/- 0.48 ppm

Nitrogen: Balance

Total Oxides of Nitrogen: 23.5 ppm

** Total NOX for Reference Use Only **

Reference Standards:

SRM GMIS:	GMIS	GMIS,GMIS
Cylinder Number:	CC-231538	CC-125604,CC-166617
Concentration:	24.41 ppm NO	25.5 ppm CO/51.0 ppm CO
Expiration Date:	06 24 11	02 27 10 - 09 18 10

Certification Instrumentation

Component:	Nitric Oxide	Carbon Monoxide
Make/Model:	Nicolet-NEXUS 470	Nicolet-NEXUS 470
Serial Number:	AEP99000154	AEP99000154
Principal of Measurement:	FTIR	FTIR
Last Calibration:	October 05, 2009	October 06, 2009

Cylinder Data

Cylinder Serial Number:	CC-233289	Cylinder Outlet:	CGA 660
Cylinder Volume:	140 Cubic Feet	Cylinder Pressure:	2000 psig, 70°F

Analytical Uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by: Mike Duncan

Mike Duncan

Unmatched Excellence

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Liquid Technology Corporation

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer	Coastal Air Consulting (Deland, Florida)
Date	July 22, 2009
Delivery Receipt	DR-25422
Gas Standard	100.0 ppm Carbon Monoxide/Nitrogen - EPA PROTOCOL
Final Analysis Date	July 22, 2009
Expiration Date	July 22, 2012
Component	Carbon Monoxide
Balance Gas	Nitrogen

Analytical Data: **DO NOT USE BELOW 150 psig**

EPA Protocol, Section No. 2.2, Procedure G-1

Replicate Concentrations

Carbon Monoxide: 102.0 ppm +/- 1.0 ppm

Nitrogen: Balance

Reference Standards:

SRM/GMIS:	GMIS
Cylinder Number:	CC-233156
Concentration:	104.91 ppm CO/Nitrogen
Expiration Date	April 16, 2011

Certification Instrumentation

Component:	Carbon Monoxide
Make/Model:	Nicolet - NEXUS 470
Serial Number:	AEP99000154
Principal of Measurement:	FTIR
Last Calibration:	July 02, 2009

Cylinder Data

Cylinder Serial Number:	CC-233184	Cylinder Outlet:	CGA 350
Cylinder Volume:	140 Cubic Feet	Cylinder Pressure:	2000 psig, 70°F

Analytical Uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by: Mike Duncan

Mike Duncan

Unmatched Excellence

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~ www.liquidtechcorp.com ~

Liquid Technology Corporation

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer	Coastal Air Consulting (Deland, Florida)
Date	December 08, 2009
Delivery Receipt	DR-26962
Gas Standard	9.00-10.0% CO2, 11.5-12.5% Oxygen/Nitrogen-EPA PROTOCOL
Final Analysis Date	December 08, 2009
Expiration Date	December 08, 2012
Component	Carbon Dioxide, Oxygen
Balance Gas	Nitrogen

Analytical Data: **DO NOT USE BELOW 150 psig**

EPA Protocol, Section No. 2.2, Procedure G-1

Reported Concentrations

Carbon Dioxide: 9.62% +/- 0.09%

Oxygen: 12.04% +/- 0.12%

Nitrogen: Balance

Reference Standards:

SRM/GMIS:	GMIS/GMIS	GMIS/GMIS
Cylinder Number:	CC-159026/CC-165377	CC-231332/CC-85458
Concentration:	5.14% CO2/N2-10.05% CO2/Nitrogen	10.1% O2/N2 - 20.97% Oxygen/N2
Expiration Date:	03/31/11 - 04/06/11	03/04/11 - 04/15/11

Certification Instrumentation

Component:	Carbon Dioxide	Oxygen
Make/Model:	Agilent 7890A	Servomex 244a
Serial Number:	CN10736166	1847
Principal of Measurement:	GC-TCD	Paramagnetic
Last Calibration:	December 05, 2009	November 20, 2009

Cylinder Data

Cylinder Serial Number:	EB-0020405	Cylinder Outlet:	CGA 590
Cylinder Volume:	140 Cubic Feet	Cylinder Pressure:	2000 psig, 70°F

Analytical Uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by: Mike Duncan

Mike Duncan

Unmatched Excellence

2564 Pemberton Drive ~ Apopka, Florida 32703 ~ Phone (407)-292-2990 ~ Fax (407)-292-3313
~ www.liquidtechcorp.com ~

Liquid Technology Corporation

Industry Leader in Specialty Gases, Equipment and Service

Certificate of Analysis

- EPA PROTOCOL GAS -

Customer	Coastal Air Consulting (Deland, Florida)
Date	November 14, 2008
Delivery Receipt	DR-23098
Gas Standard	17.0-18.0% CO2, 22.0-23.0% Oxygen Nitrogen-EPA PROTOCOL
Final Analysis Date	November 14, 2008
Expiration Date	November 14, 2011
Component	Carbon Dioxide, Oxygen
Balance Gas	Nitrogen

Analytical Data: **DO NOT USE BELOW 150 psig**

EPA Protocol, Section No. 2.2, Procedure G-1

Reported Concentrations

Carbon Dioxide: 17.27% +/- 0.17%

Oxygen: 22.62% +/- 0.22%

Nitrogen: Balance

Reference Standards:

SRM GMIS:	GMIS	GMIS GMIS
Cylinder Number:	CC-79616	CC-125554 CC-85469
Concentration:	17.4% CO2 Nitrogen	20.99% O2 N2 - 25.30% Oxygen N2
Expiration Date:	12 01 12	04.02.11 - 08.09.10

Certification Instrumentation

Component:	Carbon Dioxide	Oxygen
Make/Model:	Hewlett Packard 5890 II	Servomex 244a
Serial Number:	3336A59393	1847
Principal of Measurement:	TCD	Paramagnetic
Last Calibration:	November 05, 2008	November 10, 2008

Cylinder Data

Cylinder Serial Number:	CC-231467	Cylinder Outlet:	CGA 590
Cylinder Volume:	140 Cubic Feet	Cylinder Pressure:	2000 psig, 70°F

Analytical Uncertainty and NIST Traceability are in compliance with EPA-600/R-97/121.

Certified by:

Date: November 14, 2008

Unmatched Excellence

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~ www.liquidtechcorp.com ~

Attachment F - Project Participants

Project Participants

Arlington Environmental Services, Inc.

William Arlington
Project Director

Rufus Rhoden
Field Technician

Kaye Arlington
Laboratory Analyst

Debra Carter
Computer Analysis

Coastal Air Consulting, Inc.
Stephen Webb
Field Technician

Guiding Light Cremations, Unit 1

Geronimo Mena
Facility Manager

Broward County Environmental Management

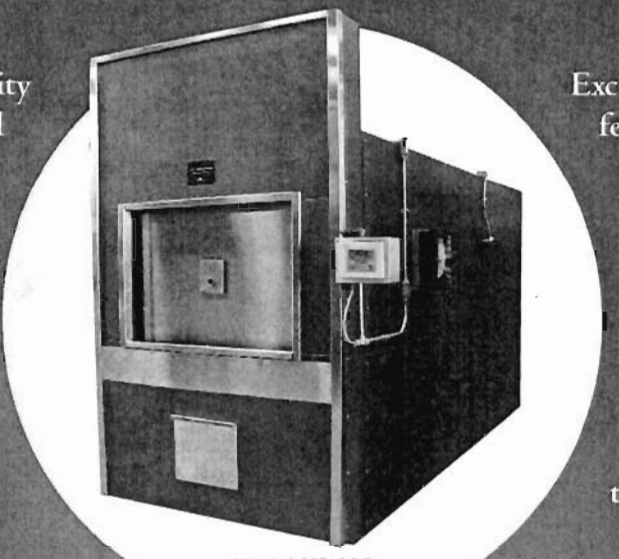
Courtney Pitters
Inspector

Attachment 2
Equipment Drawings and Brochures

The "Classic" Cremator

PERFORMANCE BEYOND EXPECTATIONS

BUILT to exacting quality and safety standards and backed by a two-year limited warranty, the fuel efficient "Classic" outperforms every other cremator in its price range. Take a look at some of the performance benefits the "Classic" offers!



Model US 100
"Classic" Cremator

Exceptional standard features combine with professional expertise to deliver the product and service you demand. Unsurpassed in customer support, you can rely on U. S. Cremation Equipment's "Classic" to provide years of trouble-free operation.

CLASSIC PERFORMANCE

- Cremate up to six bodies in a 10-hour work day
- Complete cremation every 60 - 90 minutes
- No cool down required between cremations
- Designed to cremate obese cases up to 800 lbs.
- Fully automatic PLC operating system

CLASSIC FEATURES

- Power charging door/dual hydraulic cylinders
- Primary chamber viewport
- Secondary chamber temperature recorder
- Color touch screen control – standard
- Powder coat finish with stainless steel trim

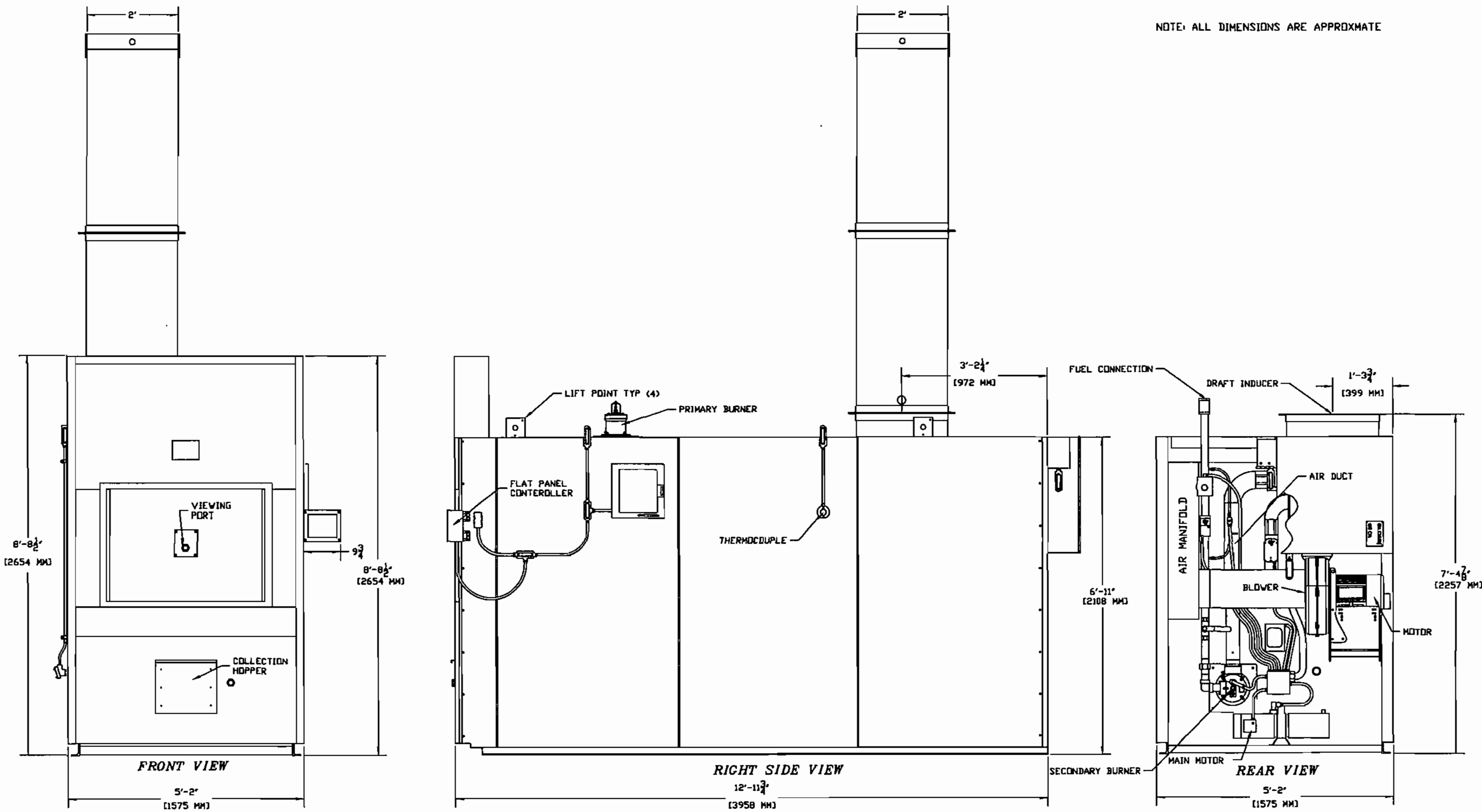
US Cremation Equipment
A Division of ... Amer[illegible]

370 S. North Lake Boulevard, Suite 1004 • Altamonte Springs, FL 32701 • Ph: 321.282.7357 • Fax: 321.282.7358
www.uscremationequipment.com • E-mail: info@uscremationequipment.com

"CLASSIC" MODEL US 100

NOTE: ALL DIMENSIONS ARE APPROXMATE

ITEM	QTY	DESCRIPTION



RELEASED TO SHOP DATE: ________

US CREMATION EQUIPMENT

US Cremation Equipment

CLASSIC MODEL US 100
FRONT, LEFT & REAR VIEWS

GAR 2/11/10

610

CLASSIC

US Cremation Equipment
A Division of... American Incinerators

HUMAN CREMATION CHAMBER SPECIFICATION

EQUIPMENT:

US Cremation Equipment a division of American Incinerators Co. - Multiple Chambered human Crematory, Natural Gas, Propane (LP) or Oil fired.

MANUFACTURER:

US Cremation Equipment a division of American Incinerators Corp.

CONSTRUCTION STANDARDS:

The American Incinerators cremation chamber shall be constructed of U.L./CSA listed components and will meet or exceed nationally accepted incinerator construction standards per the Incinerator Institute of America (IIA) publication guidelines; i.e.:

A. Primary chamber will not exceed 60% of total furnace volumes. Flue connection shall not be considered part of furnace volume.

B. Flame supervision through continuous ultraviolet scanning flame detectors on all burners.

C. High temperature refractory construction with air-cooled walls to prevent excessive heat radiation.

D. Exhaust gas temperature reduction.

INCINERATION CHAMBER DIMENSIONS:

Chamber volumes:	Primary - 73 CF Secondary - 71 CF
Structural footprint:	12'0" (L) x 5'0" (W)
Over-all dimensions:	12'7" (L) x 6'0" (W) x 9'2" (H) w/std. hyd. door

US Cremation Equipment

A Division of... American Incinerators

OPERATING TEMPERATURE:

Temperatures are determined as a result of federal, state or local permitting authority operating standards.

Typical primary chamber setting:	1,000°F-1,200°F
Typical secondary chamber setting:	1,400°F-1,800°F

RETENTION TIME:

In excess of 1 second.

CAPACITY:

One body and associated container per cremation cycle. 200 pounds per hour or 750 pounds per batch.

DRAFT:

Induced via refractory lined draft inducer.

SHIPPING WEIGHT:

24,500 lbs.

EMISSIONS:

The American Incinerators cremation chamber shall meet or exceed federal, state and local environmental regulations.

EMISSION CONTROL:

Secondary chamber equipped with one, 1,500,000 BTU/HR burner. Also equipped with an electronic exhaust gas scanner system which temporarily suspends operation of the primary chamber burner.

US Cremation Equipment

A Division of... American Incinerators

STEEL CONSTRUCTION SPECIFICATIONS:

A. The structure to be heavy 3" steel angle , square tube; 3/8" steel plate, seal welded construction.

B. Subfloors to be 3/16" steel plate, seal welded construction.

C. The exterior shell to be 12 gauge steel removable panels.

D. Interior shell to be 10 gauge steel, seal welded construction.

INSULATION & REFRACTORY SPECIFICATIONS:

A.	Hot Hearth:	3000°F abrasion resistant castable refractory, monolithic cast 7" - 13" thick, 1 -1/2" recessed top and rounded, stressed arched bottom.
B.	Chamber Floors:	3000°F abrasion resistant castable refractory, 5" thick on top of 2" 2400°F light weight insulating castable.
C.	Chamber Ceilings:	3000°F castable refractory, monolithic cast, rounded, stressed arched, 5"-9" thick, topped by 2" 2400°F light weight insulating castable.
D.	Interior Walls:	2800°F. alumina-silicate firebrick, 2 1/2" x 4 1/2" x 9", all chambers are backed by 4" of 1900°F ceramic fiber insulation
E.	Stack:	Lined with 2" of 2200°F insulating refractory.

SKIN TEMPERATURE CONTROL:

Integral dual casing, completely air-cooled design to prevent excessive heat radiation.

US Cremation Equipment

A Division of... American Incinerators

COMBUSTION EQUIPMENT:

A. Combustion Air - One, 3 phase, 208-230/460V, 17-15.5/7.6 amp 7 hp air-blower motor (1,400 CFM)

B. Primary Chamber - One 500,000 BTU/HR nozzle mix, gas-fired burner. Eclipse, North American, or equal.

C. Secondary Chamber - One, 1,500,000 BTU/HR modulating, nozzle mix, gas-fired burner. Eclipse, North American, or equal.

D. Burner Flame Safeguard - Control supervision on each burner via a flame safeguard relay and ultra-violet light detector.

E. Low Air Pressure Safety Switch - Interlocked to all burners.

EXHAUST GAS TEMPERATURE REDUCTION:

Hot air duct operating exit temperature: 900°F

HOT AIR DUCT:

10 gauge carbon steel, high temperature 2" refractory lining, pre-drilled flanges, 24" Outside Diameter, 28" at flanges.

UTILITY REQUIREMENTS:

A. GAS:

1. Pressure:

   a) Natural Gas: 7" to 9" W.C.
   b) Propane: 11" W.C.

2. Flow Rate: 2,000,000 BTU/HR

B. ELECTRICAL:

1. One, three phase, 208-230/460V, 17-15/8 amp connection for 5hp blower.

US Cremation Equipment

A Division of... American Incinerators

CREMATION CHAMBER LOADING/CLEAN-OUT DOOR:

Hydraulically operated, refractory lined, upward movement guillotine style door with gate view port.

CREMATION PROCESS CONTROL:

The cremation cycle is controlled by a programmable logic control (PLC) system. A visual confirmation of the system status is provided through control panel indicator lights and digital temperature display. Continuous fuel and air modulation is automatically controlled by a time/temperature actuated system. Operator interface is through two sets of simple push button controls and panel timer.

EXTERIOR FINISH:

The cremation chamber is finished with grey hi-resistance powder coating with stainless steel trim. Back of unit is coated with an epoxy type black coating.

Attachment 2
Emissions Calculations

Emission Calculations Based on AP-42 Table 2.1-12

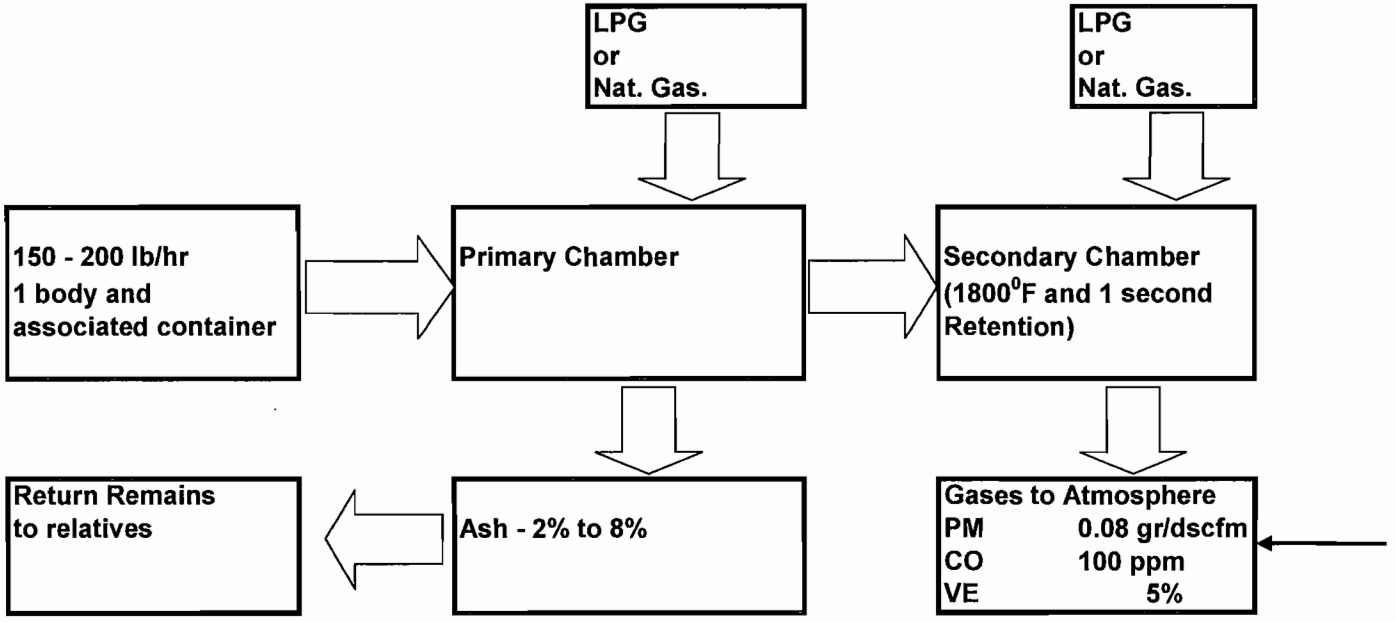
US Cremation Equipment
Model "Classic"

Pounds Incinerated Per Hour (Average)	Hours Per Year	SO2 lb/ton	SO2 lb/hr	SO2 TPY	Nox lb/ton	Nox lb/hr	Nox TPY	TOC lb/ton	TOC lb/hr	TOC TPY
200	8760	2.5	0.25	1.095	3	0.3	1.314	3	0.3	1.314

CO=100 PPM @ 7% O2 MAX, Actual CO Emissions Measured at 3.49 PPM
CO = 100 PPM X 28 MW X 1700 DSCFM X 2.595E-09 X 60 min/hr = 0.74 lb/hr CO
0.74 lb/hr CO X 8760 hrs/yr X 1 ton/2000 lb = 3.24 TPY CO

Actual Emissions were measured at 0.04 gr/dscfm at 7% O2
PM = 0.08 gr/dscf X 1 pound/7000 gr X 1700 DSCFM X 60 min/hr = 1.17 lb/hr PM
1.17 lb/hr PM X 8760 hrs/yr X 1 ton/2000 lb = 5.12 TPY PM

Attachment 4
Process Flow Diagram


LPG
or
Nat. Gas.
LPG
or
Nat. Gas.
150 - 200 lb/hr
1 body and
associated container
Primary Chamber
Secondary Chamber
(1800°F and 1 second
Retention)
Return Remains
to relatives
Ash - 2% to 8%
Gases to Atmosphere
PM 0.08 gr/dscfm
CO 100 ppm
VE 5%

524275 AUG12 2011

Environmental Consulting Services

August 9, 2011

Florida Department of Environmental Protection
FDEP Receipts
PO Box 3070
Tallahassee, FL 32315-3070

3755

RECEIVED
AUG 1[illegible] 2011
DIVISION OF AIR
RESOURCE MANAGEMENT

Re: General Permit Application
Brasota Services, Inc.
Facility ID: 0810193

To whom it may Concern:

Enclosed is one (1) copy of the above referenced application along with a check made payable to the ***Florida Department of Environmental Protection*** in the amount of $100.00 for the application fee.

I trust this application is complete; however, should you have any questions or need any additional information for issuing the general permit, please contact me at (407) 574-2021 or e-mail at AI@CFL.RR.COM .

Respectfully submitted,
AI ENVIRONMENTAL CONSULTING SERVICES

Luis Llorens
President/Project Manager

Enclosures: One (1) Application and check

598 Northlake Blvd, Ste. 1016, Altamonte Springs, Florida 32701 - Phone: (407) 520-2021, FAX: (407) 574-2456
AI@CFL.RR.COM

BRASOTA SERVICES INC
410 COMMERCE BLVD UNIT R
SARASOTA FL 34243-5029

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL™

7010 2780 0003 0985 7939

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1004

32315

U.S. POSTA
PAID
TALLEVAST.F
34270
AUG 10, 11
AMOUNT

$10.30

00019903-

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REQUESTED

Fl Dept of Enviromental
Protection FDEP Receipts
PO Box 3070
Tallahassee, FL 32315-3070