Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

August 22, 2008

Mr. Todd Degusipe, Owner
Degusipe Funeral Home
9001 South Highway 17-92
Maitland, Florida 32751

Dear Mr. Degusipe:

This is to acknowledge that your notification of intent to use the authority of Rule 62-210.310 to operate your facility was received on July 17, 2008. We have assigned ARMS No. 1170406-001 to this facility.

As you know, pursuant to Florida Statutes section 403.814, authority to operate under general permits commences thirty days after receipt of the registration form unless you have been notified by this office that your facility has not shown entitlement to operate pursuant to the rule provisions.

For your information, authority to operate pursuant to Rule 62-210.310 expires after 5 years. Therefore, a new registration form must be received no later than 5 years after the date your notice was received as indicated above. If your general permit rule conditions require testing, such testing must be completed within the time frame specified in the rule.

If you have any additional questions, please contact Dickson Dibble at 850/921-9586. .

Sincerely,

Sandra F. Veazey

Sandra F. Veazey, Chief
Bureau of Air Monitoring
and Mobile Sources

SFV/pg

cc: Ms. Caroline Shine, Central District

MEMORANDUM

TO: ***Pat Grant***

FROM: ***Dick***

DATE: ***08/22/08***

TIME: ***08:30 am***

SUBJECT: ***Letter of Acknowledgement***

DESCRIPTION: ***AIRS ID# 1170406-001-AG***

Pat,

Mr. Degusipe requests that his Letter of Acknowledgement to be sent to the following address:

Mr. Todd Degusipe
3116 Floral Way East
Apopka, Florida 32703

484589 JUL17 2008

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(4)(o), F.A.C. *($100 as of the effective date of this form)*

1170406-001

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.

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.)
DEGUSIPE FUNERAL HOME

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.)
DEGUSIPE FUNERAL HOME

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)
Street Address: **9001 SOUTH HIGHWAY 17-92**
City: **MAITLAND** County: **SEMINOLE** Zip Code: **32751**

Facility Start-Up Date (Estimated start-up date of proposed **new** facility.) (N/A for existing facility)
9/31/08

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: **TODD DEGUSIPE, OWNER**

Owner/Authorized Representative Mailing Address
Organization/Firm: **DEGUSIPE FUNERAL HOME**
Street Address: **9001 SOUTH HIGHWAY 17-92**
City: **MAITLAND** County: **SEMINOLE** Zip Code: **32751**

Owner/Authorized Representative Telephone Numbers
Telephone: **407-489-2005** Fax: **407-386-8501**
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: **SAME AS ABOVE**

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.

Todd M. DeGusipe
Signature

7/15/2008
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.

☐ 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.

This registration is for installation of a new B&L Cremation Systems, Inc. N20 Series , 150 lb/hr human crematory incinerator.

The new crematory is designed to burn human remains at the average incineration rate of 150 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers, each fired on natural gas with a maximum total design heat input rate of 1.5 mmbtu/hr (0.5 mmbtu/hr. Primary chamber, 1.0 mmbtu/hr. Secondary chamber).

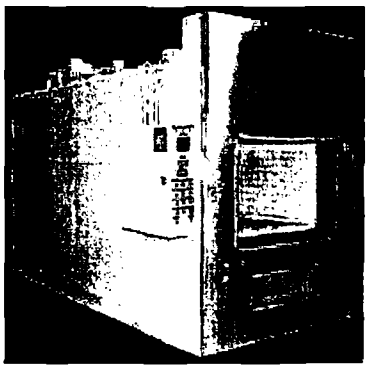
Emissions are controlled by the afterburner, which will maintain a minimum secondary chamber combustion zone temperature of 1600°F prior to and during combustion of material in the primary chamber. The secondary chamber is designed to ensure one second residence time at a gas temperature of 1800°F, and is equipped with a continuous temperature monitor and recorder.

The unit is equipped with an opacity monitor that will adjust the cremation process if excess opacity is measured. Crematory and opacity monitor information is attached.

BSL Cremation Systems, Inc.

Human Cremation

Below is the information about our N20 Series cremation retorts.



N20 - Specifications

Dimensions:
Height 8'-6"
Width 5'-6"
Length 12'-0"

Weight: 24,000 lbs.

Power Requirments:
220V, 1 Phase, 30 AMPS
110V, 1 Phase, 10 AMPS

Gas Pressure:
Natural Gas 7" W.C.
Propane Gas 11" W.C.

Cremation Rate: 150 lbs/hour

Burner Output:
Maximum Input Rating 1,500,000 BTU's per hour
Afterburner Maximum 1,000,000 BTU's per hour
(Full Modulation 100%)
Ignition Burner 300,000 BTU's per hour
Cremation Burner 500,000 BTU's per hour

Air Requirements: Outside air inlet louvers in the room located at or below burner height, capable of passing 2,500 CFM of free air.

B&L Systems, Inc.

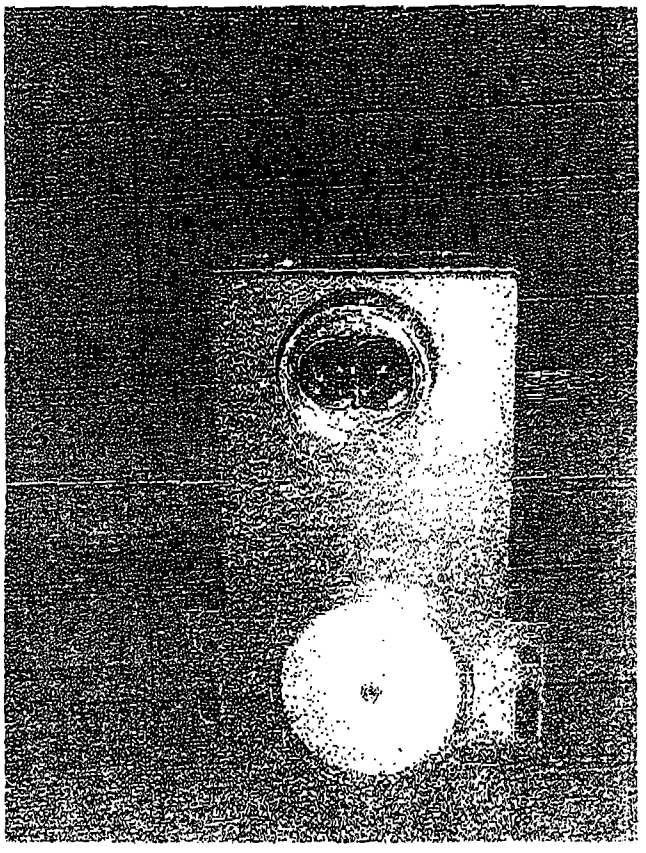
7205 114TH Avenue North • Largo, Florida 33773
1-800-622-5411 • 727-541-4666 • Facsimile 727-547-0669

TEMPERATURE CONTROL SEQUENCE

A type "K" thermocouple is placed 19 – 20 ft^3 downstream of the afterburner flame tip to measure temperature. The downstream distance is determined based on residence time calculations. The temperature signal is sent to the main control panel where it is received by a FUJI PYZ series temperature controller with a digital readout and a Honeywell DR4200 temperature recorder. The temperature controller controls the temperature via a motorized butterfly valve located on the afterburner inlet gas assembly. Gas demand is controlled to maintain a steady temperature. The ignition/cremation burner is interlocked to the afterburner temperature by the temperature controller set point. Combustion cannot start until temperature set point is reached. Alarm contacts in the temperature controller are utilized for over (high) temperature conditions. 100° F over set point the afterburner will be in maximum low fire and the ignition/cremation burner will shut off. The butterfly valve located on the secondary air inlet is controlled by a separate temperature output to add air to cool the system. At set point the unit will return to normal operation. An optimonitor smoke detector is placed on the stack and set at 10% opacity. If emissions occur the alarm will sound, a visual red warning lamp located on the control panel will illuminate and the primary burners will shut off. The excess air butterfly valve will open to add air to the secondary chamber to oxidize the emissions. After a five (5) minute period the unit will revert to normal operations.

Cremation Systems, Inc.
7205 - 114th Avenue North • Largo, Florida 33773
1-800-642-5411 • 727-541-4966 • facsimile 727-547-0669
e-mail: blcremsys@aol.com • www.blcremationsystems.com

VISIBLE OPACITY MONITOR (VOM-1)



APPLICATION: monitoring control used on retorts to warn operators and shut down processes based on opacity.

- IMPROVED RUGGED DESIGN
- EASY TO INSTALL AND SUPPORT
- UNAFFECTED BY AMBIENT LIGHT
- EXTERNAL ADJUSTMENT
- SPANS UP TO 6 FEET
- VISIBLE LED LIGHT SOURCE

B&L CREMATION SYSTEMS, INC.

GENERAL PURPOSE OPACITY MONITOR

SPECIFICATIONS

LIGHT SOURCE: Pulsed visible LED

SPECTRAL RESPONSE: Between 400nm and 500nm

ANGLE OF VIEW: Less than 4 degrees from axis

AMBIENT LIGHT: No measurable effect

MAXIMUM DISTANCE BETWEEN MONITOR AND REFLECTOR: 6 Feet

MONITOR TYPE: Retro reflective using a 3" reflector

ADJUSTMENT RANGE: 0 TO 100% opacity

ACCURACY: +/- 3% of full scale

POWER: 24 VAC, less than 10 VA

OUTPUT: Relay, DPDT, 5.0 A @ 102 VAC
LED indicator for sensitivity adjustment

TEMPERATURE: Storage, -7 degrees to 32 degrees C
Operating: -29 degrees to 66 degrees C

PHYSICAL: 8.000"H x 5.750"W x3.375" D

ENCLOSURE: Meets NEMA 3, 4, and 12 specs

OPACITY MONITOR ADJUSTMENT PROCEEDURE (NEW)

The following procedure may be necessary to be performed from time to time due to vibration on the top of the retort. This procedure is designed to be both simple and quick, and to insure the proper operation of your retort.

It is suggested that before starting. this procedure be carefully read, and if you have any questions, call the service dept. at B&L Cremation Systems. A service technician will be happy to answer any questions or assist you with the alignment / adjustment of your opacity monitor.

The best time to perform this procedure is on a cool retort.

Please check the cleanliness of the opacity monitor lens and reflector. Inspect the reflector for any damage, replacing it as necessary.

You will need the following tools.
6" adjustable wrench
7/16" wrench
A Phillips screwdriver
A small straight slot screwdriver
6' to 8' step ladder

Step 1: Open the electrical cabinet located on your retort. Inside, locate the "C1 BLOWER" contactor. At the bottom of the contactor, from left to right, you will see a red "STOP" button. To the right of this is a blue "RESET" button. Above this is a "TEST" slot (see fig 1).

Step 2: Using a pen, push the test slot to the left until only black is visible. This will disable the main blower, allowing you to adjust the opacity monitor, and hear the internal relay click

Step 3: Turn on the retort with the main timer set to zero. The "Cool Down" lamp should be illuminated.

Step 4: Next, it will be necessary to get on top of the retort. Inspect the opacity monitor, locating the red alignment L.E.D. and the sensitivity adjustment (see fig. 2). The red L.E.D. should be lit, and by passing your hand in front of the lens, you should be able to hear the opacity monitor click. If you are experiencing minor nuisance tripping of the opacity system, turn the sensitivity adjustment CLOCKWISE approximately 1/8 of a turn. This should correct the problem. Now press the round blue "RESET" button located on the "C1 BLOWER" contactor in the electrical cabinet. Your retort is now ready to operate. If, however, the red L.E.D. is not illuminated or you do not hear the clicking when you pass your hand in front of the monitor, proceed to step 5.

Step 5: Turn the sensitivity adjustment FULLY CLOCKWISE. Loosen the two mounting bolts holding the opacity monitor. By slowly moving the opacity monitor (left or right, forward or backward), obtain the maximum brightness possible for the L.E.D. Carefully tighten one of the mounting bolts, using shims as necessary, then snug the remaining bolt. Do NOT tighten this bolt. Turn the sensitivity adjustment COUNTERCLOCKWISE until the monitor clicks. Turn the sensitivity adjustment CLOCKWISE until you hear the monitor click again, then continue CLOCKWISE an additional 1/8 turn. The opacity monitor is now correctly set. Press the round blue "RESET" button on the "C1 BLOWER" contactor, completing the alignment procedure. *Please note: if the circuit board is black, counterclockwise and clockwise are reversed. Counterclockwise will be clockwise and clockwise will be counterclockwise.*

If the red L.E.D. does not illuminate, or if the monitor does not click, please contact the service department at B&L Cremation Systems to further assist you.

OPACITY MONITOR ADJUSTMENT PROCEEDURE

FIGURE 1 "C1 BLOWER"

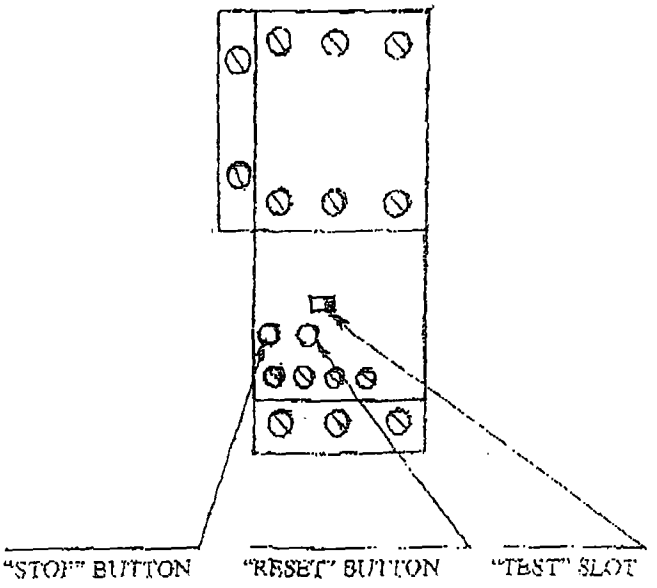
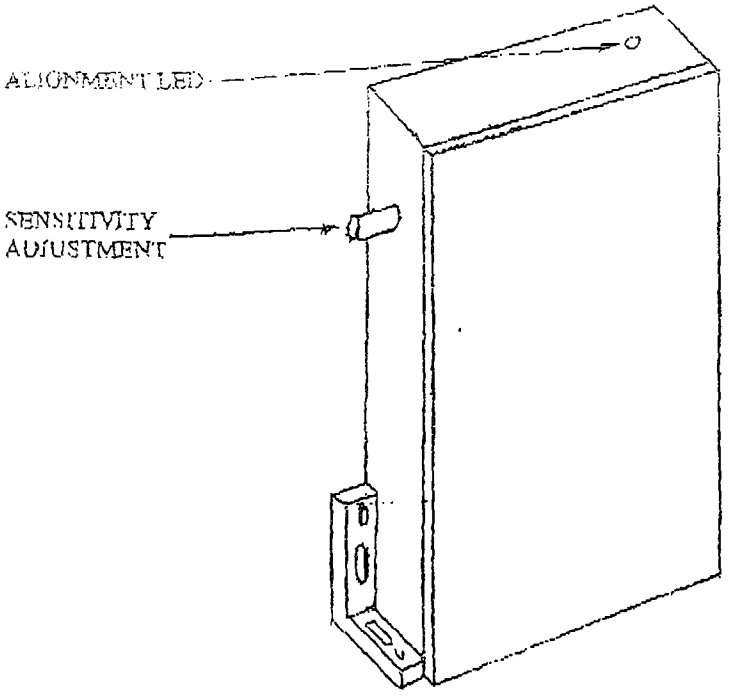


FIGURE 2, OPACITY MONITOR



CALCULATIONS FOR PRODUCTS OF COMBUSTION AND RESIDENCE TIME FOR B & L CREMATION SYSTEMS N20 SERIES, NATURAL GAS FIRED, 150 LB/HR, TYPE IV WASTE, HUMAN CREMATORY

A. BASIS: 1 LB WASTE

1. $\frac{\text{1 lb waste} \times \text{1000 Btu/lb waste}}{\text{10,000 Btu / 15 lb air}}$ = 1.5 lbs air

2. $\frac{\text{1 lb waste} \times \text{0.10 lb combustible}}{\text{lb waste}}$ = 0.10 lbs of combustibles

3. $\frac{\text{1 lb waste} \times \text{0.85 lb H20} \times 1.6^{(1)}}{\text{lb waste}}$ = 1.36 lbs of water

4. $\frac{\text{6500 Btu aux fuel}^{(2)} \times 10\ ft^3\ air/ft^3\ fuel}{1050\ Btu/ft^3\ fuel \times 13.35\ ft^3\ air/lb\ air_{@70°F}}$ = 4.64 lb of air for aux fuel

5. $\frac{\text{6500 Btu aux fuel} \times \text{0.044 lb fuel/ft}^3\text{ fuel}}{1050\ Btu/ft^3\ fuel}$ = 0.27 lb of aux. fuel

6. Sum = PRODUCTS OF COMBUSTION (POC) = 7.87 LBS POC PER LB OF WASTE @ 70 °F

B. RESIDENCE TIME @ 1800 °F

$$\frac{\text{7.87 lb POC/lb waste} \times 56.93\ ft^3/lb\ POC_{@1800\ °F} \times \text{150 lb waste/hr}}{\text{3600 sec/hr}}$$

= 18.7 ft^3/sec @1800 °F

= **18.7 ft^3 for 1 second residence time**

Thermocouple placement at: 19 ft^3
Secondary chamber operating temperature ≥ 1600 °F

(1) Correction multiplier for dry air and water vapor
(2) Fuel is natural gas

References: Incinerator Institute of America
North American Combustion Handbook

B&L Systems, Inc.

odd M. DeGusipe
116 Floral Way E.
popka, FL 32703

U.S. POSTAGE
$1.34
FCM LG ENV
32714
Date of sale
07/15/08
02 1P00 APC
FC0070400103848 02312538

Florida Department of Envionmental Protection
Receipts
P.O. Box 3070
Tallahassee, FL 32315-3070

Cashlisting: **69764** Cashlist Area: **3755** Description: **DIV OF AIR RESOURCES MGMT.**
Deposit No: **291031** Date Deposited: **07/17/2008** Contact: **E. WALKER**

Object	Transmittal	Dep DDN	Receipt Number	Pre-Numbered Receipt	Name	Check Number	Payment Amount	Reference Account	Payment Number	Remittance Number	Fund	Grant
002272	49576	484589	631400		TODD DEGUSIPE	0102	$100.00	1170406-001	891065	789722	PFTF	
	49576	484598	631409		TITAN AMERICA	0000243810	$100.00	7/25/2008-HC	891073	789731	PFTF	
					Object Code 002272 Subtotal:		$200.00					
002278	49576	484591	631402		CROSS REMEDIATION INC	16004	$1,000.00	49428	891066	789724	APCTF	
	49576	484592	631403		COOPER AND ASSOCIATES	11645	$200.00	49764	891067	789725	APCTF	
					Object Code 002278 Subtotal:		$1,200.00					
002303	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$600.00		891081	789726	PFTF	
					Object Code 002303 Subtotal:		$600.00					
002304	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$600.00		891084	789726	PFTF	
	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$200.00		891079	789726	PFTF	
	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$1,300.00		891085	789726	PFTF	
					Object Code 002304 Subtotal:		$2,100.00					
002309	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$20.00		891083	789726	PFTF	
	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$20.00		891082	789726	PFTF	
	49576	484593	631404		HILLSBOROUGH COUNTY BOCC	03133664	$20.00		891080	789726	PFTF	
					Object Code 002309 Subtotal:		$60.00					