F&A RECEIPT 667369 05/08/2009

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MAY 12 2009

Bureau of Air Monitoring & Mobile Sources

ANIMAL 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)*

1010377-004

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.
XX 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.)
FOSTER'S PET CEMATION SERVICE

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.)
SPRING HILL FACILITY

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)
Street Address: **15204 COUNTY LINE ROAD**
City: **SPRING HILL** County:**PASCO** Zip Code:**34610**

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

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: **DOROTHY FOSTER, OWNER**

Owner/Authorized Representative Mailing Address
Organization/Firm: **FOSTER'S PET CREMATION SERVICE**
Street Address: **15204 COUNTY LINE ROAD**
City: **SPRING HILL** County:**PASCO** Zip Code:**34610**

Owner/Authorized Representative Telephone Numbers
Telephone: **(727) 856-7566** Fax: **(727) 857-9675**
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:**SAME AS ABOVE**
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.

Dorothy Foster
Signature

5-7-09
Date

Design Calculations

If this is an initial registration for a proposed new animal 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.

XX Registration is not for proposed new animal 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 removal of EU 002 (B&L BLP 500) and installation of a Matthews Cremation Group, Power Pak II animal crematory, (EU 006) purchased from Sumter Cremation Services (FDEP Facility No. 1190044). The BLP 500 unit that is being removed is being relocated to Pinellas County and is addressed in a separate registration.

Emission Unit 003 is a Model BLP 500/150 animal crematory incinerator designed to burn animal remains at the average incineration rate of 150 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.35 MMbtu/hr (0.35 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 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

Emissions Unit 004 is a Model BLP 1000/250 animal crematory incinerator designed to burn animal remains at the average incineration rate of 250 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.35 MMbtu/hr (0.35 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 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

Emissions Unit 005 is a Model BLP 1750/300 animal crematory incinerator designed to burn animal remains at the average incineration rate of 300 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.50 mmbtu/hr (0.50 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 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

* SEE ATTACHED ADDENDUM TO THIS REGISTRATION - EU001 WAS INADVERTANTLY OMITTED FROM THIS FORM, PPs 9 & 10. W. Willis

The new Emission Unit 006 is a Matthews Cremation Group, PowerPak II animal crematory, that burns animal remains at an average rate of 200 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers, fired exclusively on natural gas.

Emissions are controlled by the afterburner which is designed to maintain a minimum secondary chamber combustion zone temperature of 1,600 ° F prior to and during combustion of material in the primary chamber. The secondary chamber is also designed to ensure a residence time greater than one second at a gas temperature of 1,800 ° F and is equipped with a continuous temperature monitor and recorder.

The unit is equipped with an opacity monitoring system that shuts down the primary burner if excess opacity is detected in the exhaust stack. Opacity monitor and incinerator information is attached.

* ADDENDUM TO #1010377-004
REGISTRATION DATED 05/08/09
PPS 9 & 10. D. Dibble

Design Calculations

If this is an initial registration for a proposed new animal 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.

XX Registration is not for proposed new animal 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.

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EXISTING EMISSIONS UNITS

Emissions Unit 001 is a Model N20 that burns animal remains at an average incineration rate of 150 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.3 MMbtu/hr (0.3 MMbtu/hr, Primary chamber, 1.0 Mmbtu/hr, Secondary chamber). Emissions are controlled by the afterburner that maintains a minimum secondary chamber combustion zone temperature of 1600 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

Emission Unit 003 is a Model BLP 500/150 animal crematory incinerator designed to burn animal remains at the average incineration rate of 150 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.35 MMbtu/hr (0.35 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 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

Emissions Unit 004 is a Model BLP 1000/250 animal crematory incinerator designed to burn animal remains at the average incineration rate of 250 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.35 MMbtu/hr (0.35 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 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

Emissions Unit 005 is a Model BLP 1750/300 animal crematory incinerator designed to burn animal remains at the average incineration rate of 300 pounds per hour. The incinerator consists of primary and secondary (afterburner) chambers each fired exclusively on natural gas with a maximum total design heat input rate of 1.50 mmbtu/hr (0.50 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 Deg 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 Deg F and is equipped with a continuous temperature monitor and recorder.

MATTHEWS CREMATION GROUP

CALCULATIONS FOR PRODUCTS OF COMBUSTION AND RESIDENCE TIME FOR POWER-PAK II, NATURAL GAS FIRED, 200 LB/HR, TYPE IV WASTE, ANIMAL 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. $\frac{\text{6500 Btu aux fuel}^{(2)} \times 10\ ft^3\ air/ft^3\ fuel}{1050\ Btu/ft^3\ fuel \times 13.35\ ft^3\ air/lb\ air_{@70°F}}$ = 4.63 lb of air for aux fuel

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

6. Sum = PRODUCTS OF COMBUSTION (POC) = 7.86 lbs POC Per lb of waste @ 70 °F

B. RESIDENCE TIME @ 1800 °F

$$\frac{7.86\ lb\ POC/lb\ waste \times 56.93\ ft^3/lb\ POC_{@1800°F} \times 200\ lb\ waste/hr}{3600\ sec/hr}$$

= 24.85 ft^3/sec @1800 °F **= 25 ft^3 for 1 second residence time**

C. THERMOCOUPLE PLACEMENT

Secondary chamber operating temperature at or > 1800 °F = 25 ft^3 from flame tip

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

References: Incinerator Institute of America
North American Combustion Handbook

Matthews
INTERNATIONAL
Cremation Division

Power-Pak II

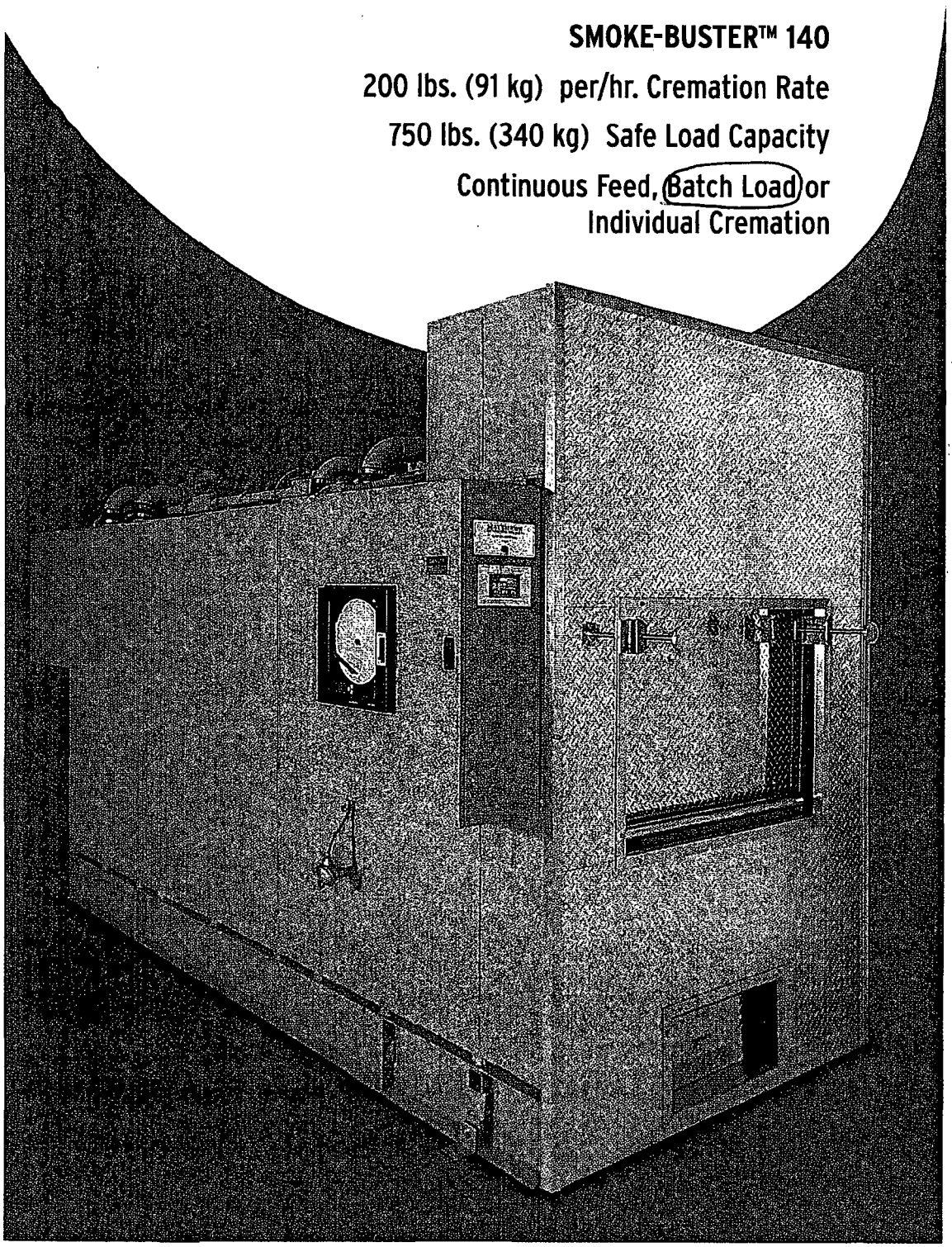
Animal Incineration System

SMOKE-BUSTER™ 140

200 lbs. (91 kg) per/hr. Cremation Rate

750 lbs. (340 kg) Safe Load Capacity

Continuous Feed, Batch Load or
Individual Cremation



The Standard of Excellence in Cremation Solutions.

Matthews Cremation Division (MCD) represents over 100 years of experience in cremator technology and our equipment has set the standard of excellence for quality and performance. With over 3,000 installations in 50 countries, we are the oldest and largest manufacturer in the cremation industry.

From design through startup, our goal is to protect your interest and make certain that your investment in cremation equipment is supported with the foundation for long-term success. We'll determine your equipment needs, evaluate your facility, design floor plans, guarantee environmental acceptance, assist your contractors in the installation and provide on-site operator training.
Our Matthews commitment is to go the extra mile...

- Customized Return on Investment Analysis (ROI)
- Zoning Board Assistance
- Operator Certification
- 24/7 Customer Service
- Custom Engineering & Design
- Industry & Trade Support
- Widest array of cremation accessories
- Lease & Finance options.

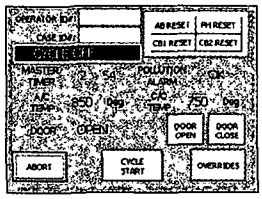
Developed for high volume reliability. Designed for fully automatic operation. Engineered for safe, efficient performance.

The Power-Pak II Animal Incineration System was created to be the system of choice for pet cemeteries, veterinarians, humane societies and animal care facilities. Its innovative characteristics and features make the Power-Pak II the fastest, most fuel efficient pet cremator in its class.

- **Automatic Operation –** The self-monitoring control system simplifies the cremation process, shutting itself off upon completion of the cycle
- **Operator Safety –** Underwriter's Laboratories (UL) listed represents the most widely recognized measure of safety and compliance, ensuring the safety of personnel and facilities
- **SMOKE-BUSTER™ 140 –** This feature effectively consumes and destroys smoke and odor from the cremation process
- **Dual Cremation Burners –** Improved operator safety and even burn distribution is provided by two industrial grade burners
- **Pollution Monitoring and Control System –** Automatically checks and regulates stack emissions.

The Power-Pak II is pre-wired, pre-piped, and pre-tested before shipment, requiring only off-loading, one connection each for gas and electricity and placement of the stack we provide.

Quiet Operation–
Exclusive "Whisper Shield" allows operation without disturbing other services.



Basic PLC System -
6-inch Black/White touch screen monitor which replaces the customary lights, buttons and switches with a cleaner, more streamlined operator control.

Insulation Thickness–
12" of multi-component materials for longest lasting refractory and highest thermal efficiency.

Retrieval System–
Retrieval of cremated remains is safe and quick with the convenient external collection hopper.

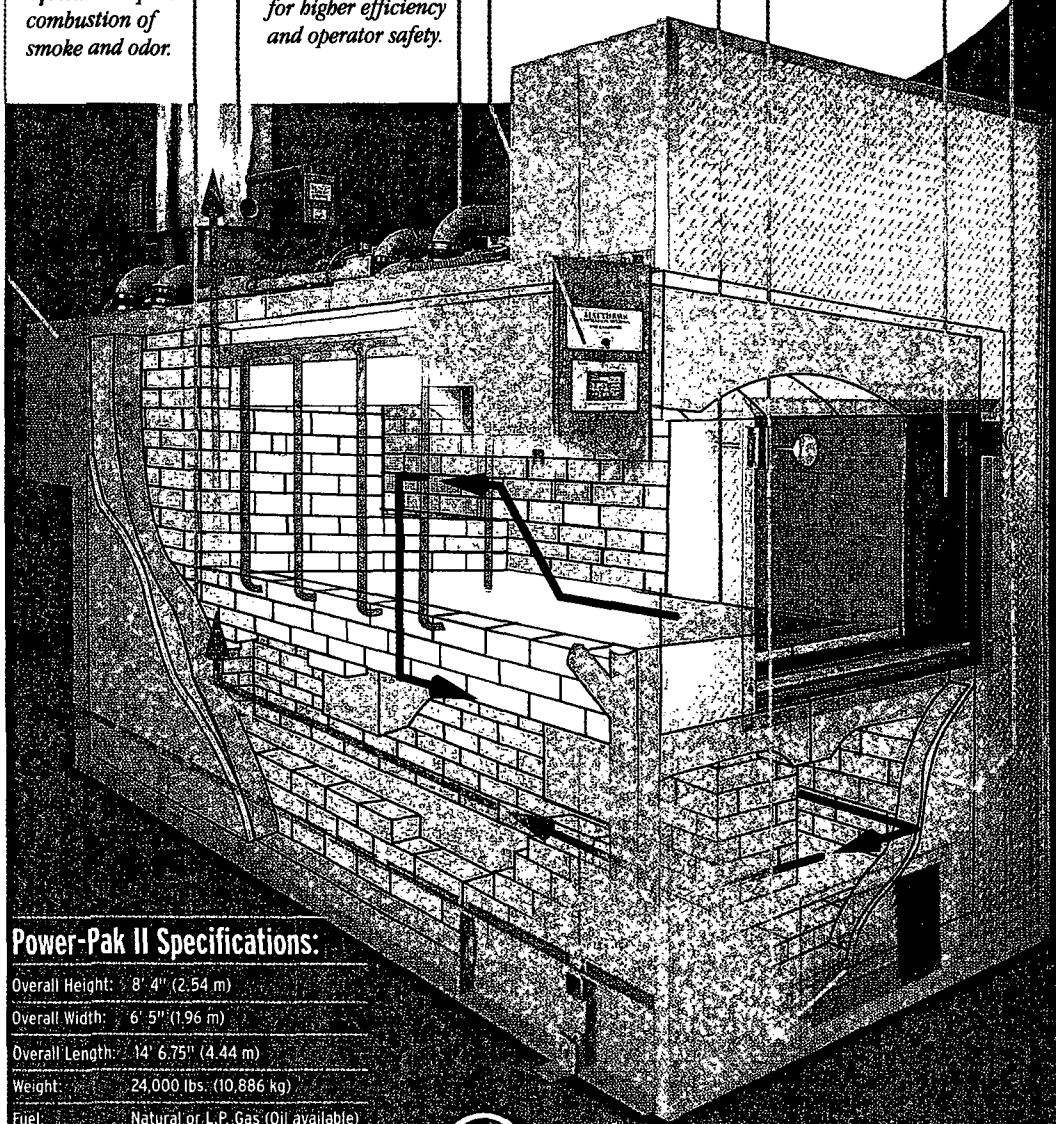
Stainless Steel Stack–
Non-Corrosive, with 4½" refractory lining for strength, durability and safety.

Cremation Chamber Floor–*Unique "Hot Hearth" design eliminates fluid runoff and minimizes fuel consumption.*

Loading Door–
Self-locking, self-sealing door opens and closes at the push of a button.

Dual Cremation Burners– *Two industrial Grade Burners are positioned overhead for higher efficiency and operator safety.*

SMOKE BUSTER™ System–*Complete combustion of smoke and odor.*



Power-Pak II Specifications:

Overall Height:	8' 4" (2.54 m)
Overall Width:	6' 5" (1.96 m)
Overall Length:	14' 6.75" (4.44 m)
Weight:	24,000 lbs. (10,886 kg)
Fuel:	Natural or L.P. Gas (Oil available)
Electrical:	220 volts, 1-phase/3-phase

Control panel can be located right, left or remote

Dimensions include control panel and whisper shield.

Who is Matthews Cremation Division?

Matthews Cremation Division is the premier manufacturer of Industrial Equipment & Engineering (IEE) and ALL Crematory (ALL) cremation equipment. We are the global leader in cremation equipment sales, service and repair. Representing the highest standards for safety, we manufacture a wide range of human and animal cremation equipment. As a full-service provider, we offer accessory equipment, supplies and memorial products to meet your business requirements.

A significant number of our cremators are still operating, including some manufactured more than 40 years ago. Discover why Matthews Cremation Division is the most trusted name in cremation products and services.

GENERAL PURPOSE OPACITY MONITOR

SPECIFICATIONS

Light Source:	Pulsed Visible LED
Spectral Response:	Between 400 nm and 500 nm
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 3'' reflector
Adjustment Range:	0 to 100% Opacity
Accuracy:	+/- 3% of full scale
Power:	24 VAC
Output:	Relay, DPDT, 5.0 A@102 VAC

GENERAL PURPOSE OPACITY MONITOR

SPECIFICATIONS

Light Source:	Pulsed Visible LED
Spectral Response:	Between 400 nm and 500 nm
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 3'' reflector
Adjustment Range:	0 to 100% Opacity
Accuracy:	+/- 3% of full scale
Power:	24 VAC
Output:	Relay, DPDT, 5.0 A@102 VAC

AIR GENERAL
PERMIT REGISTRATION

FOSTER'S PET CREMATION SERVICE

Spring Hill, Florida

Facility ID: 1010377
SES Reference No. 09P226

Prepared For:

FOSTER'S PET CREMATION SERVICE
15204 County Line Road
Spring Hill, Florida 34610

Prepared By:

SOUTHERN ENVIRONMENTAL
SCIENCES, INC.
1204 North Wheeler Street
Plant City, Florida 33566

RESIDENCE TIME CALCULATIONS

MANUFACTURER'S DATA

MATTHEWS POWER PAK II
ANIMAL CREMATORY