



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

April 22, 2008

Mr. Michael P. Gendron
Fort Myers Memorial Gardens
1589 Colonial Boulevard
Fort Myers, Florida 33907

Dear Mr. Gendron:

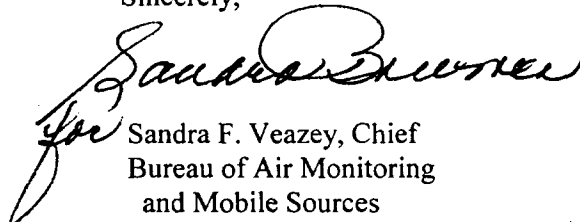
This is to acknowledge that your notification of intent to use the authority of Rule 62-210.310 to operate your facility was received on March 20, 2008. We have assigned ARMS No. 0710266-001 to this facility.

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, Chief
Bureau of Air Monitoring
and Mobile Sources

SFV/pg

cc: Mr. Sherrill Culliver, South District

RECEIVED
MAR 28 2008
Bureau of Air Monitoring
& Mobile Sources

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)

0710266-001

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.)

NORTHSTAR FUNERAL SERVICES OF FLORIDA LLC

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.)

FORT MYERS MEMORIAL GARDENS

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)

Street Address: 1589 COLONIAL BLVD

City: FORT MYERS

County: LEE

Zip Code: 33907

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

7/08

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: **MICHAEL P. GENDRON-MANAGER**

Owner/Authorized Representative Mailing Address

Organization/Firm: **FORT MYERS MEMORIAL GARDENS**

Street Address: **1589 COLONIAL BLVD**

City: **FORT MYERS**

County: **LEE**

Zip Code: **33907**

Owner/Authorized Representative Telephone Numbers

Telephone: **239-936-0555**

Fax: **239-425-9233**

Cell phone (optional): **239-340-6499**

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:

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.

Signature

Date

3/11/08

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.
See attached process flow diagram.

HUMAN CREMATORY
AIR GENERAL PERMIT REGISTRATION FORM

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0710266-001

DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY MONITORING SOURCES

MAR 24 2008

RECEIVED

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Fax:

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3/11/08

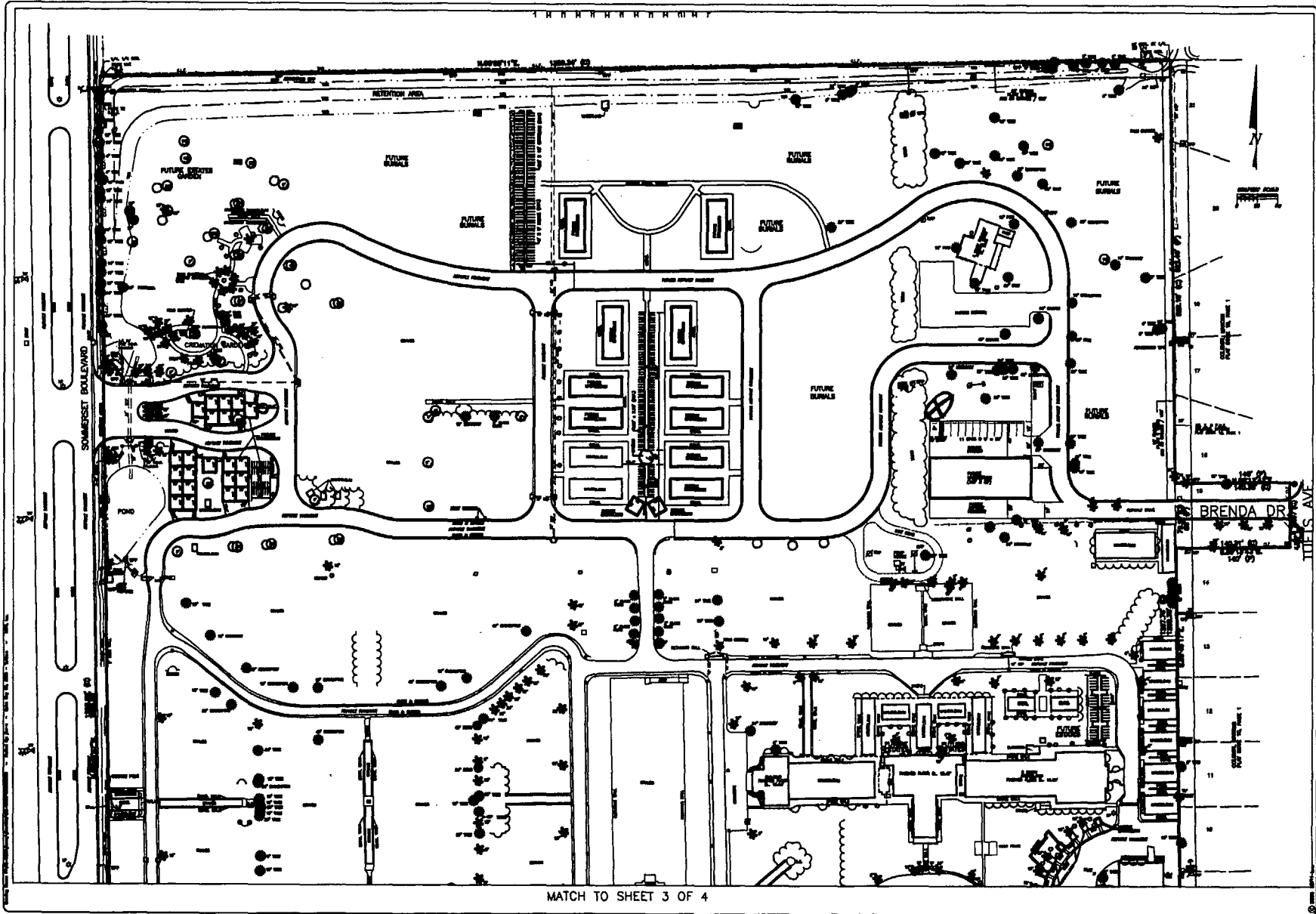
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See attached process flow diagram.



MATCH TO SHEET 3 OF 4

<p>DATE PLOTTED: 5/6/2005 7:48:00 AM</p> <p>USER: Jims</p> <p>PROJECT: 03-7055</p> <p>SHEET: 4 OF 4</p>	<p>FOR MORE INFORMATION CONTACT:</p> <p>PT. WYERS MUNICIPAL ENGINEERS</p> <p>1000 W. WYERS AVENUE, SUITE 100</p> <p>PT. WYERS, VA 22124</p> <p>PHONE: (540) 861-1111</p> <p>FAX: (540) 861-1112</p> <p>WWW: WWW.PWENGINEERS.COM</p>	<p>DATE: 5/6/2005</p> <p>BY: Jims</p> <p>SCALE: AS SHOWN</p> <p>PROJECT: 03-7055</p> <p>SHEET: 4 OF 4</p>
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VERTICAL SCALE: 1" = 20'

HORIZONTAL SCALE: 1" = 40'

NOT TO SCALE

ADAPT ALL SIZED DIMENSIONS ACCORDINGLY

CONSULTING CIVIL ENGINEER

Engineering

A Division of LBFH, Inc.

1000 W. WYERS AVENUE, SUITE 100

PT. WYERS, VA 22124

PHONE: (540) 861-1111

FAX: (540) 861-1112

WWW: WWW.LBFH.COM

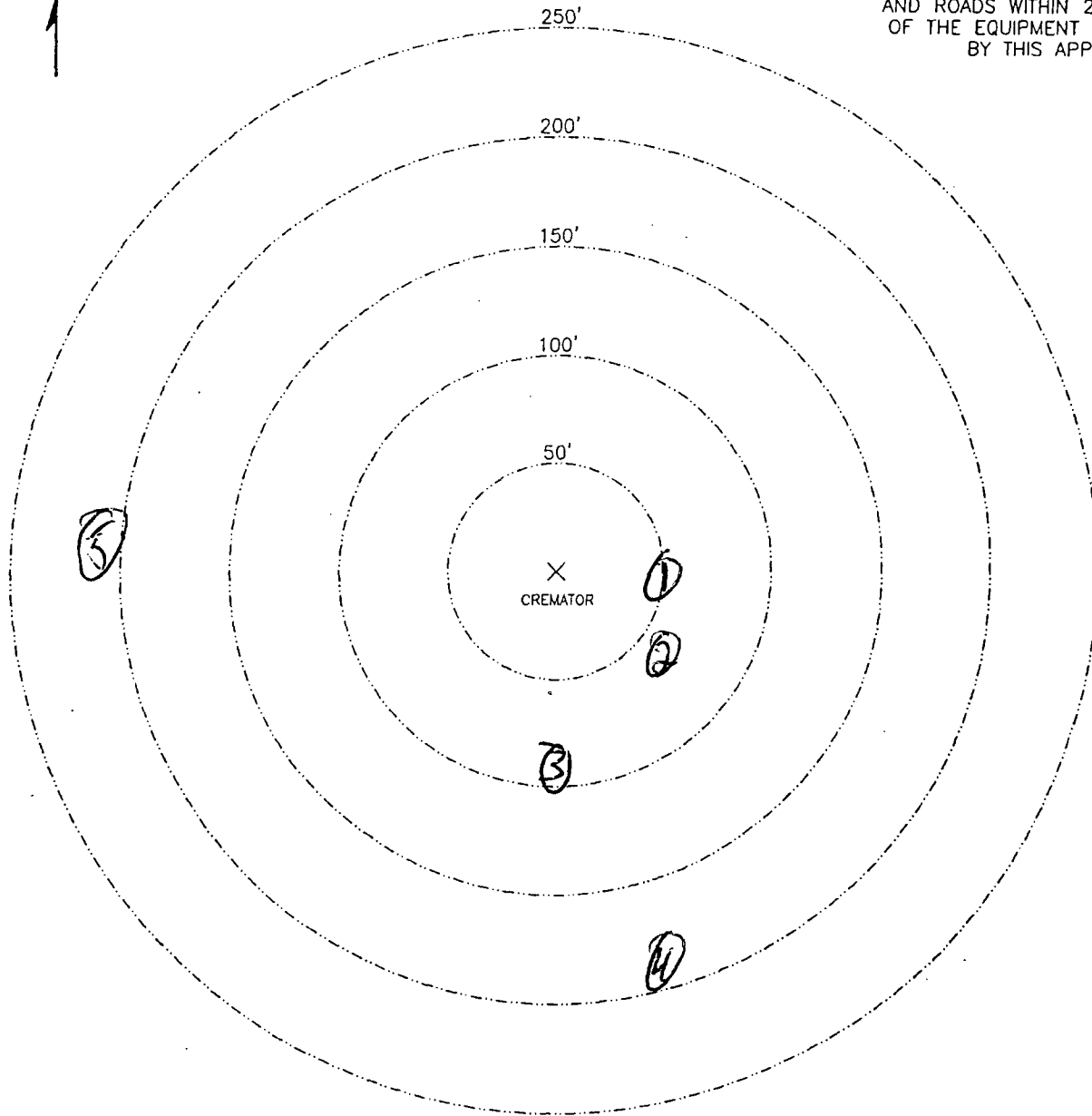
⊗ = STACK LOCATION

PLOT PLAN

NORTH



SHOW ALL SURROUNDING BUILDINGS
AND ROADS WITHIN 250 FEET
OF THE EQUIPMENT COVERED
BY THIS APPLICATION.



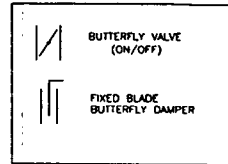
INSTRUCTIONS

1. INDICATE LOCATION AND TYPE OF BUILDING BY THE USE OF SMALL NUMBERED CIRCLES WITH THE DESCRIPTION BELOW.
2. SHOW ROADS AS LINES REPRESENTING THE ROAD EDGES. INDICATE STREET NAMES AND HIGHWAY NUMBERS.
3. SHOW WOODED OR CLEARED AREA BY APPROXIMATE BOUNDARY LINES AND THE WORDS "WOODS," "CLEARED," "CORNFIELD," ETC.

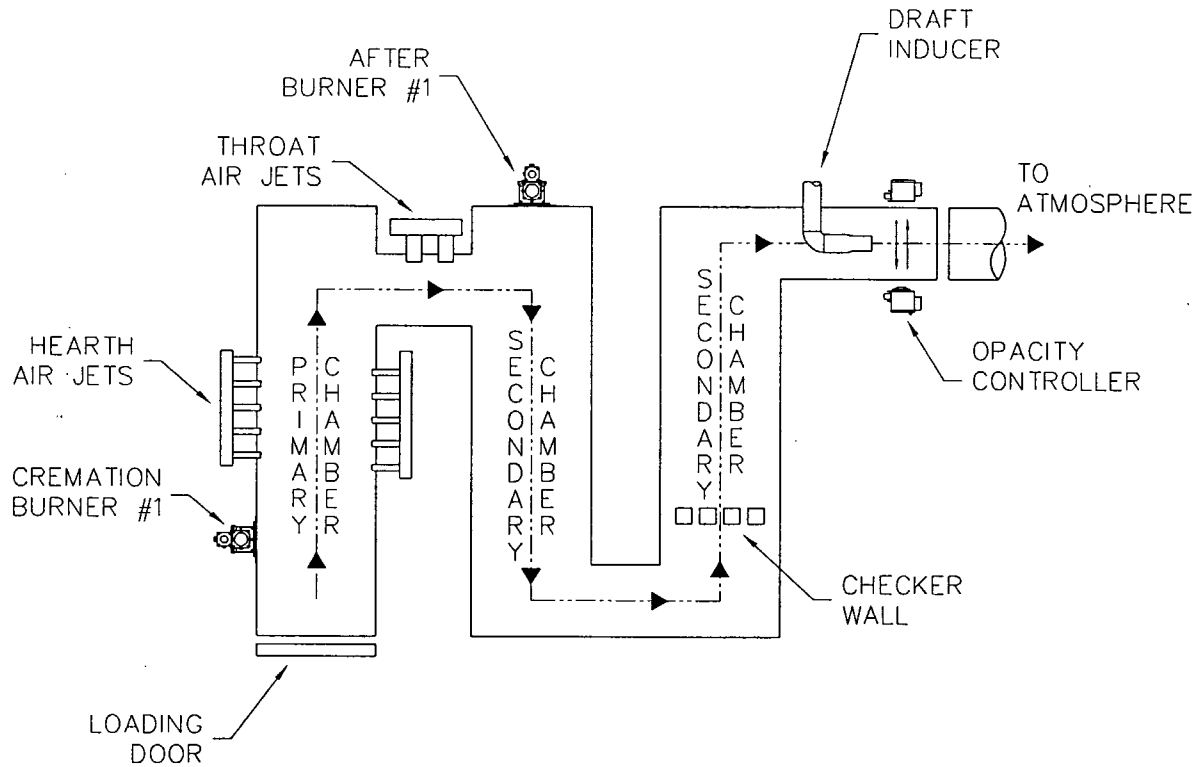
STRUCTURE DESCRIPTION

- | STRUCTURE | DESCRIPTION |
|-----------|------------------------|
| (1) | - MAINTENANCE BUILDING |
| (2) | MAUSOLEUM BUILDING |
| (3) | MAUSOLEUM BUILDING |
| (4) | FUNERAL HOME |
| (5) | MAUSOLEUM BUILDING |
| (6) | |
| (7) | |
| (8) | |
| (9) | |
| (10) | |

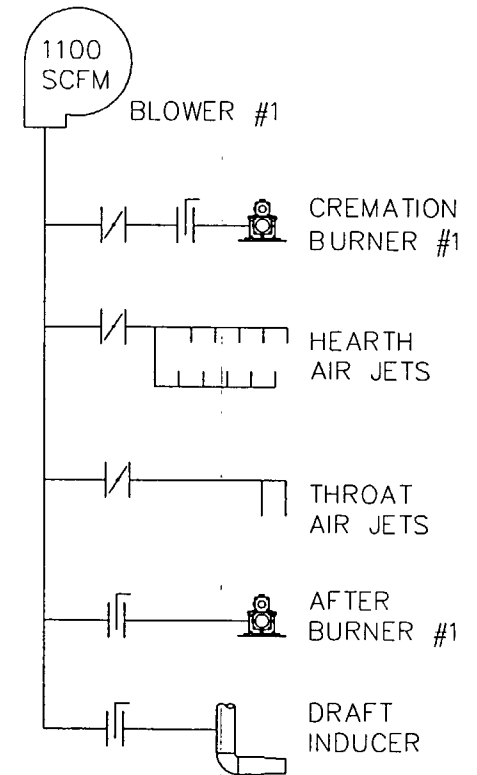
LEGEND OF SYMBOLS



FLOW DIAGRAM



AIR SCHEMATIC

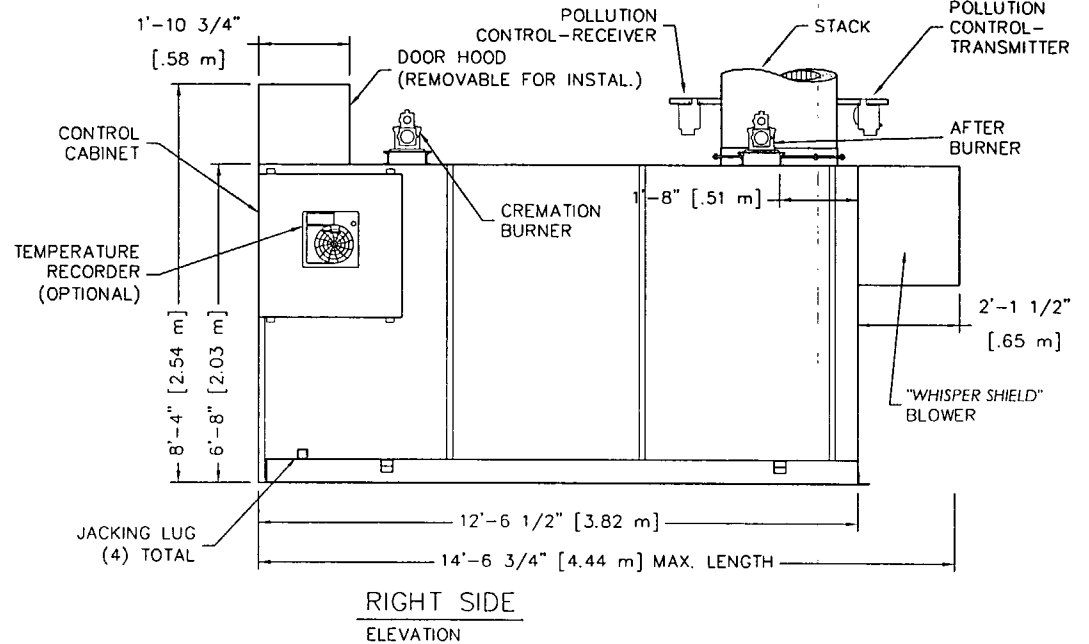
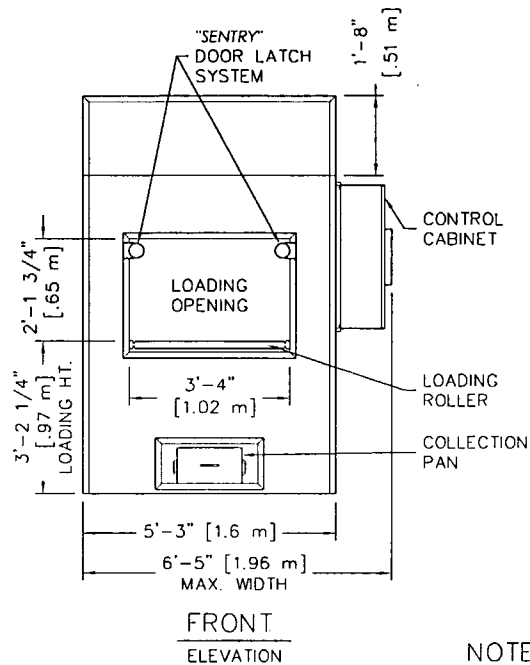


Matthews
CREMATION DIVISION

2045 Sprint Boulevard
Apopka, Florida 32703
USA

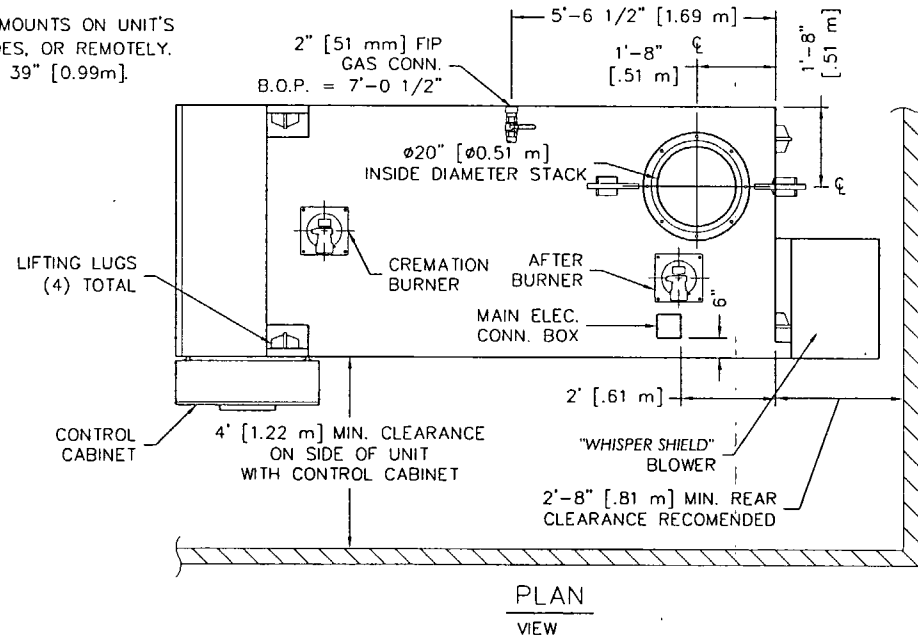
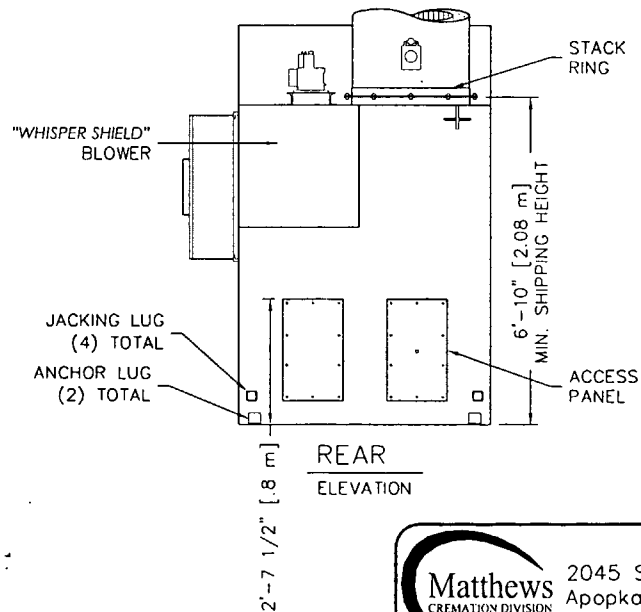
POWER PAK II
FLOW DIAGRAM
& AIR SCHEMATIC


DATE:	08-05-05	SCALE:	1/4"=1'
DRAWN:	JG	PLOT SCALE:	1:48
APRVD:		SHEET:	1 OF: 1
DWG FILE:	PPIFlowDiaAirSchem		
DWG #:	0000523		



NOTES:

- 1) CONTROL CABINET MOUNTS ON UNIT'S LEFT OR RIGHT SIDES, OR REMOTELY.
- 2) CHAMBER WIDTH IS 39" [0.99m].



 <p>2045 Sprint Boulevard Apopka, Florida 32703 USA</p>	POWER-PAK II		DATE: 10-26-06	SCALE: 1/4"=1'
	PLAN & ELEVATIONS INCL: CLEARANCES, REQUIREMENTS & RECOMENDATIONS		DRAWN: JG	PLOT SCALE: 1:48
			APRVD:	SHEET: 1 OF: 2
			DWG FILE: PPII-MarketingPlanElevS1R4	
			DWG #:	0000140

CREMATOR CLEARANCES

RECOMMENDED

MINIMUM

TOP: ②	2 FEET [610 mm]	6 INCHES [152 mm]
CABINET SIDE:	4 FEET [1.22 m]	4 FEET [1.22 m]
OTHER SIDE:	2 FEET [610 mm]	6 INCHES [152 mm]
FRONT:	9 FEET [2.74 m]	8 FEET [2.44 m]
REAR:	3 FEET [0.91 m]	32 INCHES [812 mm]
STACK:	6 INCHES [152 mm]	6 INCHES [152 mm]

1. FOR CLEARANCES OTHER THAN THOSE SHOWN, OR FOR SPECIAL REQUIREMENTS, CONSULT YOUR MCD REP.

②. FROM HIGHEST POINT ON UNIT.

3. CONTROL CABINET MOUNTS ON UNIT'S LEFT OR RIGHT SIDES, OR REMOTELY. (SEE PLAN VIEW, SHEET 1).

4. REAR OF UNIT REFERS TO THE "BACK PLATE", RATHER THAN THE BACK OF THE "WHISPER SHIELD". (SEE PLAN VIEW, SHEET 1).

CREMATOR REQUIREMENTS

FUEL: A PRESSURE REGULATOR ADJUSTABLE TO 7" [178 mm] W.C. FOR NATURAL GAS, OR 11" [279 mm] W.C. FOR LP GAS.

CAPACITY: RANGES FROM 2.0 TO 3.0 MILLION BTU/HR [2.1 TO 3.1 MILLION KILOJOULES/HR] DEPENDING UPON AMOUNT OF BURNERS.

ELECTRICAL: 230 VOLT, 3 ϕ , (40A BREAKER) AND 115v (10A BREAKER), OR 230 VOLT, 1 ϕ , (70A BREAKER) AND 115v (10A BREAKER) 50/60 HERTZ

AIR: LOUVER NEAR THE REAR OF THE UNIT CAPABLE OF PASSING 2,500 CU FT/MIN [70.8 CU M/MIN] OF FREE AIR (36" X 36") [914 mm X 914 mm].

STACK INSTALLATION INSTRUCTIONS

1. APPLY A 1/2" THICK MORTAR JOINT TO EXPOSED REFRACTORY SURFACE IN STACK RING. LOWER THE BASE STACK SECTION (B) ONTO STACK RING (A) AND FASTEN WITH HARDWARE PROVIDED (NO MORE THAN (2) STACK SECTIONS SHALL BE LIFTED TOGETHER). REPEAT PROCESS FOR REMAINING STACK SECTIONS. IF SECTIONS OF VARYING LENGTHS ARE SUPPLIED, ASSEMBLE AS TO AVOID FLANGES & LIFTING EYES INTERFERING WITH RAIN COLLAR LOCATION.

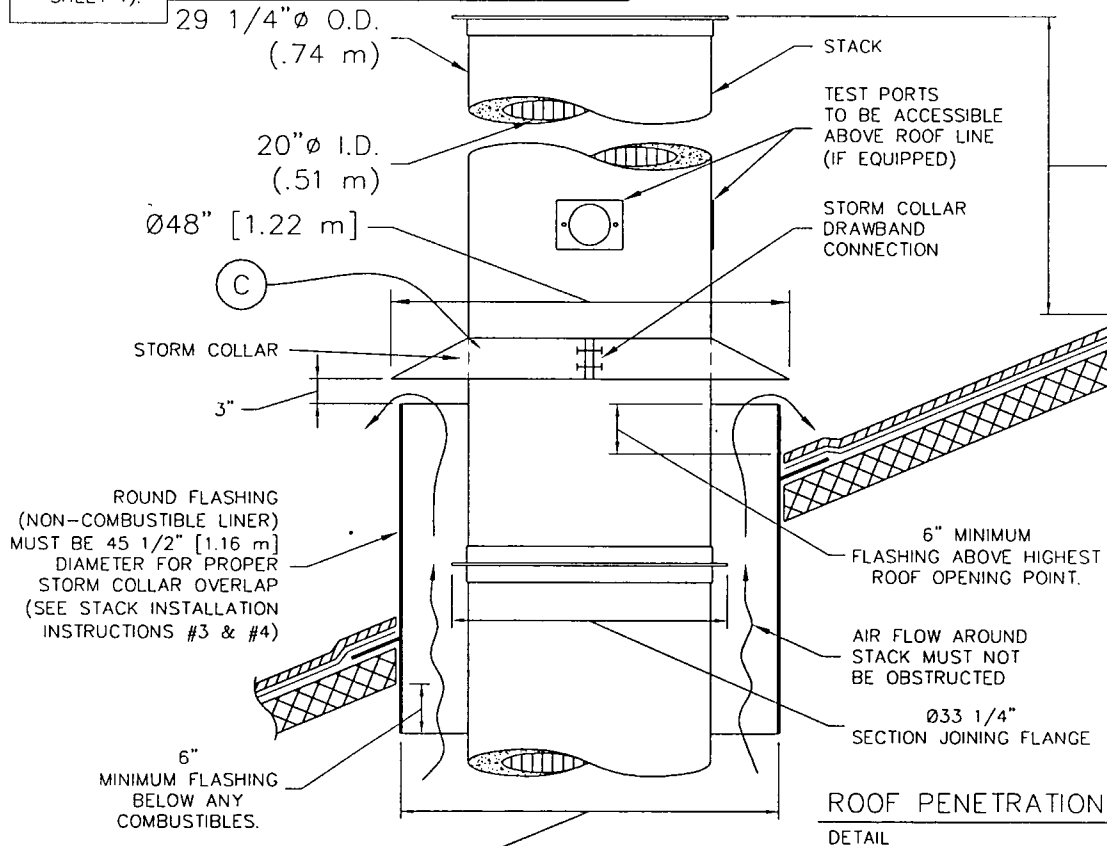
2. INSTALL STORM COLLAR ON STACK, 3" [76 mm] ABOVE NON-COMBUSTIBLE LINER (FLASHING), ALLOWING FOR PROPER VENTILATION (SEE DETAIL).

3. APPLY A 1/4" [6 mm] BEAD OF HIGH-TEMPERATURE SILICON SEALANT (PROVIDED BY MCD) TO THE JOINT BETWEEN THE STORM COLLAR (C) AND THE STACK (B).

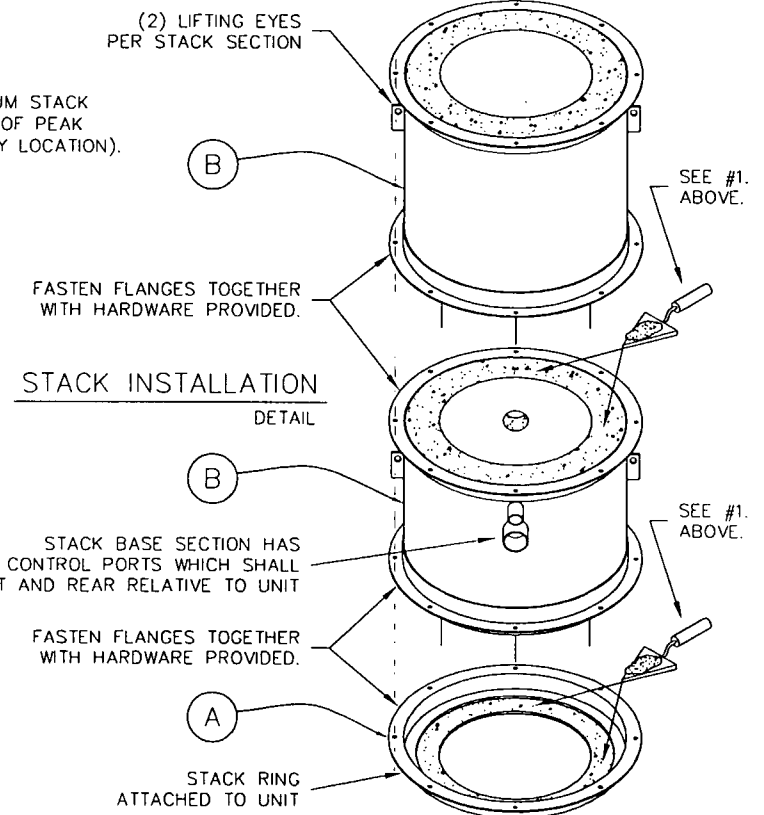
4. STORM COLLAR IS FURNISHED BY MCD. THE NON-COMBUSTIBLE LINER (FLASHING) TO BE PROVIDED BY THE OTHERS.

5. IF FIFTY PERCENT OF THE STACK LENGTH IS ABOVE THE ROOF, GUY WIRES MAY BE REQUIRED. CONSULT WITH YOUR MCD REP.

6. RAIN CAP NOT REQUIRED.



36" MINIMUM STACK ABOVE ROOF PEAK (MAY VARY BY LOCATION).



④5 1/2" REQUIRED FOR PROPER STACK CLEARANCE.



2045 Sprint Boulevard
Apopka, Florida 32703
USA

POWER-PAK II

STACK DETAILS, CLEARANCES &
INSTALLATION INSTRUCTIONS.
REFRACTORY STACK DETAIL

DATE:	08-18-05	SCALE:	1/2"=1'
DRAWN:	JG	PLOT SCALE:	1:24
APRVD:		SHEET:	2 OF 2
DWG FILE:	PPII-MarketingStackRefS2R2		
DWG #:	0000140		

SPECIFICATIONS- Model Power-Pak II

1. Equipment Type Model Power-Pak II
 - A. Model No. IE43-PPII
 - B. Underwriters Laboratories Listing and File No. ... 87E8; MH14647

2. Dimensions
 - A. Footprint 12' – 6 ½" x 6' – 8"
 - B. Maximum Length 14' - 6½" (4.43 m)
 - C. Maximum Width 6' -5" (1.96 m)
 - D. Maximum Height 8' - 4" (2.54 m)
 - E. Chamber Loading Opening 25 ¾" H x 39" W (655 mm x 990 mm)

3. Weight 24,000 lbs. (11,000 kg)

4. Utility/Air Requirements
 - A. Gross Gas Input, Natural or LP Gas 2,000,000 BTU/hr. (2,100,000 kJ/h)
2,500,000 BTU/hr. (2,600,000 kJ/h) if equipped
with preheat burner
 - Running Gas Pressure, Natural Gas 7 inches (180 mm) water column or greater
 - Running Gas Pressure, LP Gas 11 inches (280 mm) water column or greater
 - B. Electrical Supply 230 volt, 3Ø or 1Ø, 50/60 hz (other available)
 - C. Air Supply 2,500 cfm (70 standard m³/min)

5. Incineration Capacity 150 lbs./hr. (68 kg/h)

6. Typical Loading Capacity of Waste Types 750 lbs. (340 kg/h)

7. Construction and Safety Standards Incineration Institute of America, Underwriters
Laboratories, Canadian Standards Association

8. Steel Structure Construction
 - A. Frame 2" (51 mm) square tubing
 - B. Front/Rear Plates 3/8" (10 mm) plate
 - C. Floor Plates 3/16" (5 mm) plate
 - D. Outer Side Casing 12 gauge (3 mm) plate
 - E. Inner Side Casing 12 gauge (3 mm) plate

9. Stack Construction
 - A. Inner Wall 4 1/2" (110 mm) insulating firebrick or castable
 - B. Outer Wall 12 gauge (3 mm) sheet, 304 s.s., welded seams
(unlined stack available)

10. Draft Nozzle Construction Schedule 40 type 316 s.s. pipe, welded
connections

11. Main Chamber Door Construction
 - A. Steel Shell 3/16" (5 mm) steel, welded with reinforcement
 - B. Outer Refractory 1" (25 mm) insulating block
 - C. Inner Refractory 4½" (110 mm) insulating firebrick

12. Primary Chamber Wall Construction
 - A. Outer Casing Wall 12 gauge (3 mm) sheet
 - B. Inner Frame/Air Compartment 2" (51 mm) air compartment
 - C. Inner Casing Wall 12 gauge (3 mm) sheet

SPECIFICATIONS- Model Power-Pak II

- D. Outer Refractory Wall 5" (127 mm) insulating block
 E. Inner Refractory Wall 4½" (110 mm) firebrick
13. Secondary Chamber Wall Construction
- A. Outer Casing Wall..... 12 gauge (3 mm) sheet
 B. Inner Frame/Air Compartment 2" (51 mm) air compartment
 C. Inner Casing Wall 12 gauge (3 mm) sheet
 D. Outer Refractory Wall 6" (150 mm) insulating block
 E. Inner Refractory Wall 4½" (110 mm) firebrick
14. Refractory Temperature Ratings
- A. Standard Firebrick..... 3,100° F. (1700° C)
 B. Insulating Firebrick..... 2,600° F. (1430° C)
 C. Castable Refractory (Hearth) 2,550° F. (1370° C)
 D. Castable Refractory 2,550° F. (1370° C)
 E. Insulating Block..... 1,900° F. (1040° C)
 F. Bonding Mortar 3,200° F. (1760° C)
15. Chamber Volumes (not including external flues, stacks or chimneys)
- A. Primary Chamber 64 cubic feet (2.0 m³)
 B. Secondary Chamber 74 cubic feet (2.0 m³)
16. Emission Control Features
- A. Secondary Chamber with Afterburner Included
 B. Opacity Monitor and Controller with Visual and Audible Alarms..... Included
 C. Auxiliary Air Control System..... Included
 D. Microprocessor Temperature Control System..... Included
17. Operating Temperatures
- A. Primary Chamber..... 1,200° F. - 1,800° F. (650° C - 1000° C)
 B. Secondary Chamber 1,400° F. - 1,800° F. (760° C - 1000° C) as required
18. Secondary Chamber Retention Time > 1 second
19. Ash Removal Door functions as a heat shield. Sweep out beneath front door into hopper that fills collection pan.
20. Safety Interlocks
- A. High Gas Pressure..... Optional
 B. Low Gas Pressure Optional
 C. Blower Air Pressure Included
 D. Door Position Included
 E. Opacity Included
 F. Motor Starter Function Included
 G. Chamber Temperature..... Included
 H. Motor Overload Included
 I. Flame Quality..... Included
 J. Burner Safe Start..... Included
22. Burner Description..... The nozzle mix burners used on this cremation equipment are industrial quality and designed

SPECIFICATIONS- Model Power-Pak II

for incinerator use.

- 23. Ultraviolet Flame Detection..... Ultraviolet flame detection has proven to be the most reliable means of flame safety. The system is completely sealed in a quartz capsule to eliminate problems, caused by moisture and dust created in the cremation process, which effect flame rod detectors.
- 24. Operating Panel Indicating Lights
 - A. Safe Run..... Included
 - B. Door Closed..... Included
 - C. Pollution Alarm..... Included
 - D. Afterburner On (Secondary Burner)..... Included
 - E. Cremation Burner On..... Included
 - F. Low Fire Cremation Burner On..... Included
 - G. Afterburner (Secondary Burner) Reset..... Included
 - H. Cremation Burner Reset..... Included
 - I. Hearth Air..... Included
 - J. Throat Air Off..... Included
- 25. Automatic Timer Functions
 - A. Master Cycle..... Included
 - B. Afterburner (Secondary Burner)..... Included
 - C. Cremation Burner..... Included
 - D. Low Fire Cremation Burner..... Included
 - E. Hearth Air..... Included
 - F. Throat Air..... Included
 - G. Pollution Monitoring..... Included
 - H. Afterburner (Secondary Burner) Prepurge..... Included
 - I. Cremation Burner Prepurge..... Included
 - J. Cool Down..... Included
- 26. Exterior Finish
 - A. Primer..... 2 coats rust inhibiting
 - B. Finish..... 2 coats textured finish
- 27. Start-Up and Training Startup of cremation equipment and training of operators to properly operate and maintain the equipment is performed on-site under actual operating conditions. Included is a comprehensive owner's manual, with details on the equipment, its components and proper operation.
- 28. Environmental Submittals Complete technical portion of state environmental permits. Engineering calculations, technical data, existing stack test results and equipment blueprints provided.

COMBUSTION CALCULATIONS
 Industrial Equipment & Engineering Company
 Model IE43-PPII Cremation Incinerator, Fired on Propane Gas

7-Mar-08

THESE CALCULATIONS HAVE BEEN PREPARED TO EVALUATE THE COMBUSTION PROCESS IN THE MODEL IE43-PPII (POWER-PAK II) CREMATORY INCINERATOR.

THE INCINERATOR INSTITUTE OF AMERICA HAS PUBLISHED THE FOLLOWING SPECIFICATIONS COVERING AVERAGE WASTES.

WASTE TYPE	TYPE 0	TYPE 4
BTU PER POUND	8500	1000
POUND ASH PER POUND WASTE	0.05	0.05
POUND MOISTURE PER POUND WASTE	0.1	0.85
POUND COMBUSTIBLES PER POUND WASTE	0.85	0.1
HOURLY CONSUMPTION OF WASTE (LBS)	5	145

1. PRODUCTS OF COMBUSTION FROM TYPE 0 WASTE

A. COMBUSTION AIR

$$\frac{8500 \text{ BTU/LB}}{100 \text{ BTU/CU. FT OF AIR}} \times 200\% \times 0.075 \text{ LB/CU.FT AIR} = 12.75 \text{ LBS/LB WASTE}$$

B. COMBUSTIBLES

FROM CHART ABOVE = 0.85 LBS/LB WASTE

C. WATER VAPOR

FROM CHART ABOVE = 0.10 LBS/LB WASTE

D. TOTAL FLUE PRODUCTS PER POUND WASTE = 13.70 LBS/LB WASTE

2. PRODUCTS OF COMBUSTION FROM TYPE 4 WASTE

A. COMBUSTION AIR

$$\frac{1000 \text{ BTU/LB}}{100 \text{ BTU/CU. FT OF AIR}} \times 200\% \times 0.075 \text{ LB/CU.FT AIR} = 1.50 \text{ LBS/LB WASTE}$$

B. COMBUSTIBLES

FROM CHART ABOVE = 0.10 LBS/LB WASTE

C. WATER VAPOR

FROM CHART ABOVE = 0.85 LBS/LB WASTE

D. AUXILIARY FUEL (PROPANE GAS)

$$3000 \text{ BTU/LB OF WASTE} \times \frac{0.119 \text{ LBS/CU. FT}}{2500 \text{ BTU/CU. FT}} = 0.143 \text{ LBS/LB WASTE}$$

E. COMBUSTION AIR FOR AUXILIARY FUEL

$$0.14 \text{ LBS GAS/LB W.} \times 15.7 \text{ LBS AIR/LB GAS} = 2.20 \text{ LBS/LB WASTE}$$

F. TOTAL FLUE PRODUCTS PER POUND WASTE = 4.79 LBS/LB WASTE

SECONDARY CHAMBER SPECIFICATIONS

MAXIMUM BTU CONSUMED PER HOUR	1200000
SECONDARY AIR (THROAT AIR) SUPPLIED (CFH)	10000
OPERATING TEMPERATURE (°F)	1800
SECONDARY VOLUME (CU. FT)	74
SECONDARY AREA (SQ. FT)	2.44
FLAME PORT AREA (SQ. FT)	2.95
MIXING BAFFLES AREA (SQ. FT)	1.36

3. FLUE PRODUCTS FROM AFTERCHAMBER

A. AFTERBURNER PROPANE GAS USAGE

$$480 \text{ CU. FT/HR} \quad \times \quad 0.119 \text{ LB/CU. FT} \quad = \quad 57 \text{ LBS/HOUR}$$

B. AFTERBURNER COMBUSTION AIR

$$\frac{1200000 \text{ BTU/HR}}{100 \text{ BTU/CU. FT AIR}} \quad \times \quad 0.075 \text{ LB/CU. FT AIR} \quad = \quad 900 \text{ LBS/HOUR}$$

C. TYPE 0 WASTE

$$13.70 \text{ LBS/LB WASTE} \quad \times \quad 5 \text{ LB/HR} \quad = \quad 69 \text{ LBS/HOUR}$$

D. TYPE 4 WASTE

$$4.79 \text{ LBS/LB WASTE} \quad \times \quad 145 \text{ LB/HR} \quad = \quad 695 \text{ LBS/HOUR}$$

E. MASS FLOW OF COMBUSTION AIR

$$10000 \text{ CU. FT/HR} \quad \times \quad 0.075 \text{ LB/CU. FT AIR} \quad = \quad 750 \text{ LBS/HOUR}$$

F. TOTAL FLUE PRODUCTS

$$= \underline{\underline{2470 \text{ LBS/HOUR}}}$$

4. VELOCITY AND TIME CALCULATIONS

A. SCFM CALCULATION

$$2470 \text{ LBS/HR} \quad \times \quad \frac{13.35 \text{ STD. CU. FT/LB}}{60 \text{ MIN/HR}} \quad = \quad 550 \text{ SCFM}$$

B. TOTAL PRODUCTS ACFM @ 1800 °F

$$\frac{2260 \text{ °RANKINE}}{530 \text{ °RANKINE}} \quad \times \quad 549.6 \text{ CFM} \quad = \quad 2344 \text{ ACFM}$$

C. RETENTION TIME

$$\frac{74 \text{ CU. FT}}{2344 \text{ ACFM}} \quad \times \quad \frac{60 \text{ SECONDS}}{1 \text{ MINUTE}} \quad = \quad 1.89 \text{ SECONDS}$$

D. VELOCITY IN FLAME PORT

$$\frac{2344 \text{ ACFM}}{2.95 \text{ SQ. FT}} \quad \times \quad \frac{1 \text{ MINUTE}}{60 \text{ SECONDS}} \quad = \quad 13.2 \text{ FEET/SECOND}$$

E. VELOCITY AT MIXING BAFFLES

$$\frac{2344 \text{ ACFM}}{1.36 \text{ SQ. FT}} \quad \times \quad \frac{1 \text{ MINUTE}}{60 \text{ SECONDS}} \quad = \quad 28.7 \text{ FEET/SECOND}$$

F. VELOCITY IN SECONDARY CHAMBER

$$\frac{2344 \text{ ACFM}}{2.44 \text{ SQ. FT}} \quad \times \quad \frac{1 \text{ MINUTE}}{60 \text{ SECONDS}} \quad = \quad 16.0 \text{ FEET/SECOND}$$

**EMISSIONS TESTING
REPORT**

PERMIT NO. 0950126-005-AG

**IE43-PPII, POWER-PAK II
CREMATOR**

PREPARED FOR:

BALDWIN FAIRCHILD

ORLANDO, FLORIDA

MAY 5, 2005

PREPARED BY:

ATC



AIR TESTING & CONSULTING, INC.

333 FALKENBURG ROAD, SUITE B-214
TAMPA, FLORIDA 33619

ATC



AIR TESTING & CONSULTING, INC.

333 FALKENBURG ROAD, SUITE B-214
TAMPA, FLORIDA 33619

To the best of my knowledge, all field and analytical procedures comply with Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

A handwritten signature in cursive script that reads "Kenneth E. Given". The signature is written in black ink and is positioned above a horizontal line.

Kenneth E. Given, P.E.

5-18-05

Date

1.0 INTRODUCTION

On May 5, 2005, Air Testing & Consulting, Inc., conducted the following tests on Baldwin Fairchild's Human Crematory Incinerator located at 301 N. Ivanhoe Blvd. in Orlando, Florida:

- (1) *Particulate Emission (EPA Methods 1 – 5)*
- (2) *Carbon Monoxide (EPA Method 10)*
- (3) *Visible Emissions (EPA Method 9)*
- (4) *Oxygen (EPA Method 3A)*

These tests were performed at the request of Mathews Cremation Division to prove compliance on the Power Pak II crematory incinerator. Orange County, Environmental Protection Division, representatives, Gregory Bryant, Ilka Bundy and John Casper audited the test.

2.0 SUMMARY OF RESULTS

The results of the emission testing are presented in the Test Summary. The Particulate emissions averaged 0.0549 grains per dry standard cubic foot (gr/dscf) and CO emissions averaged 2.2 parts per million (ppmv), each corrected to 7% O₂. Opacity, highest six-minute average, on the stack, was 0%.

3.0 SUMMARY OF TEST DATA

PLANT : BALDWIN

UNIT : POWER-PACK II

RUN NUMBERS :1, 2, 3

TEST DATE : 5/5/05

	#1	#2	#3	AVERAGES
DATE	5/5/05	5/5/05	5/5/05	
START TIME	10:32	13:05	15:27	
END TIME	11:50	14:09	16:29	
STACK DIAMETER (INCHES)	19.5	19.5	19.5	
NOZZLE DIAMETER (INCHES)	0.550	0.550	0.550	
TEST TIME (MINUTES)	60	60	60	
NUMBER OF TEST POINTS PER RUN	24	24	24	
STACK GAS TEMPERATURE (°F)	850.0	991.8	1128	989.9
STACK GAS MOISTURE (%)	12.51	9.76	6.56	
STACK GAS MOLECULAR WEIGHT	28.50	28.83	29.21	
STACK GAS VOLUME SAMPLED (CUBIC FEET)	34.375	36.840	40.110	37.108
VOLUME SAMPLED (SCF @ 68°F)	34.585	37.020	40.270	37.292
STACK GAS VELOCITY (FEET PER SECOND)	18.14	17.30	19.75	18.39
STACK GAS FLOW RATE (ACFM)	2257.0	2152.2	2457.7	2288.9
STACK GAS FLOW RATE (DSCFM @ 68°F)	801.7	711.5	769.2	760.8
OXYGEN, %	16.0	14.0	14.5	
PARTICULATE CONC (GR/DSCF) @7% O ₂	0.0359	0.1122	0.0165	0.0549
PARTICULATE MASS RATE (LBS/HOUR)	0.0871	0.3396	0.0500	0.1589
CO CONC @ 7% O ₂ , ppmv	1.42	2.01	3.26	2.23
CO MASS RATE (LBS/HOUR)	0.00175	0.00310	0.00503	0.0033
ISOKINETIC SAMPLING RATE, %I	90.4	109.0	109.7	

FIELD DATA AND SAMPLES UNDER THE CONTROL OF:

TIM CAPELLE

LABORATORY ANALYSIS UNDER THE CONTROL OF:

ATC

MEMORIAL
FUNERAL HOMES • CEMETERY

1589 Colonial Blvd., Fort Myers, Florida 33907
(239) 936-0555

March 12, 2008

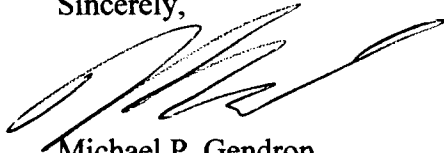
Department of Environmental Protection
Division of Air Resource Management
South District Air Program
2295 Victoria Avenue Suite 364
Fort Myers, Florida 33902-2549

Mr. Bob Stewart,

We are in the process of adding a human crematory at our funeral home/cemetery located at 1589 Colonial Blvd in Fort Myers. Enclosed you will find your application, specs from the manufacturer as well as your check for \$100.00 for your application fee. Please feel free to contact me at your convenience with any questions or concerns as we move through this process.

Your anticipated guidance and support on this permit is greatly appreciated.

Sincerely,



Michael P. Gendron
Florida Licensed Funeral Director/Manager

2008 MAR 20 11 01:55
RECEIVED
DIVISION OF AIR RESOURCE MGMT

Florida Department of Environmental Protection

Florida Department of Environmental Protection
Cash Receiving Application (CRA)
Cashlisting by Deposit #: 281534 thru 281534
Printed: 3/20/2008 4:43:33 PM - Page 11

Cashlisting: **67430** Cashlist Area: **3755** Description: **DIV OF AIR RESOURCES MGMT.**
 Deposit No: **281534** Date Deposited: **03/20/2008** Contact: **E. WALKER**

Object	Transmittal	Dep	DDN	Receipt Number	Pre- Numbered Receipt	Name	Check Number	Payment Amount	Reference Account	Payment Number	Remittance Number	Fund	
002272	47540			619400		FT MYERS MEMORIAL GARDENS AND	000820	\$100.00	0710266-001 3/27/2008-HC	866252	769562	PFTF	
Object Code 002272 Subtotal:								\$100.00					
Cashlisting 67430 Total:								\$100.00					

FROM

126890145

FORT MYERS MEMORIAL
GARDENS FUNERAL HOME
1589 COLONIAL BLVD

FORT MYERS

FL 33907

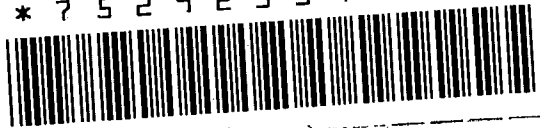
TINA WELLBORN

239-936-0555

TO

FLORIDA DEPT OF ENVIRONMENTAL PROTECTION
111 SOUTH MAGNOLIA DRIVE
TALLAHASSEE FL 32301
Air Resource Management 850 921 9581

* 7 5 2 9 2 3 3 4 7 4 0 *



Payment

Origin Waybill Number

FMY

75292334740

Bill to:

Receiver 3rdParty



Paid in Advance

1 800 Call-DHL

Billing Reference (will appear on invoice)

of Pkgs

Weight (LBS)

Packaging One box must be checked
Express Envelope Express Pack Other Packaging

Special Instructions

SAT

HAA

LAB

Next Day

10:30

Next Day

12:00

Next Day

3:00

2nd Day

Day

75292 334740

75292 334740

ORIGINAL SIGNED

TLHT6Z FSC

001 (09/08) EC
PACKAGE LABEL