MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT

DOCKET #05-23

COMPANY: Evans Funeral Chapel

LOCATION: Evans Funeral Chapel & Cremation Services - White Marsh, P.A.
11543 Philadelphia Road
White Marsh, Maryland 21162

APPLICATION: One (1) human crematory.

ITEM	DESCRIPTION
1	Notice of Application and Informational Meeting
2	Environmental Justice (EJ) Information - EJ Fact Sheet and MDE Score and Screening Report
3	Permit to Construct Application – Forms 5, 5A, 5EP, 5T, modeling results, emissions calculations, process flow diagram, vendor specifications, and plot plan.
4	Zoning Approval

MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION

NOTICE OF APPLICATION AND INFORMATIONAL MEETING

The Maryland Department of the Environment, Air and Radiation Administration (ARA) received a permit-to-construct application from Evans Funeral Chapel on February 21, 2023, for the installation of one (1) human crematory. The proposed installation will be located at Evans Funeral Chapel & Cremation Services - White Marsh, P.A., 11543 Philadelphia Road, White Marsh, Maryland 21162.

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 41 which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%.

Copies of the application, the EJ mapping tool screening report (which includes the score), and other supporting documents are available for public inspection on the Department's website at https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx (click on Docket Number 05-23). Any applicant-provided information regarding a description of the environmental and socioeconomic indicators contributing to that EJ score can also be found at the listed website. Such information has not yet been reviewed by the Department. A review of the submitted information will be conducted when the Department undertakes its technical review of all documents included in the application.

Pursuant to the Environment Article, Section 1-603, Annotated Code of Maryland, an Informational Meeting has been scheduled so that citizens can discuss the application and the permit review process with the applicant and the Department.

An Informational Meeting will be held on Wednesday, May 24, 2023, at 6:00 pm at the White Marsh Volunteer Fire Company, 10331 Philadelphia Road, White Marsh, Maryland 21162.

The Department will provide an interpreter for deaf and hearing impaired persons provided that a request is made for such service at least ten (10) days prior to the meeting.

Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director
Air and Radiation Administration

Maryland Department of the Environment

The Applicant's Guide to Environmental Justice and Permitting

What You Need to Know

This fact sheet is designed to provide guidance to applicants on incorporating environmental justice screening requirements pursuant to House Bill 1200, effective October 1, 2022.

What is Environmental Justice?

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment. House Bill 1200 adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues.

What is House Bill 1200 and what does it require?

Effective October 1, 2022, House Bill 1200 requires a person applying for a permit from the Department under §1-601 of the Environment Article of the Annotated Code of Maryland or any permit requiring public notice and participation to include in the application an EJ Score for the census tract where the applicant is seeking the permit; requiring the Department, on receiving a certain permit application to review the EJ Score; and requiring notices to include information related to EJ Scores and generally relating to environmental permits and environmental justice screenings.

What is a "Maryland EJ Tool"?

The term "Maryland EJ Tool" means a publicly available state mapping tool that allows users to: (1) explore layers of environmental justice concern; (2) determine an overall EJ score for census tracts in the state; and (3) view additional context layers relevant to an area.

Maryland Department of the Environment

The Applicant's Guide to Environmental Justice and Permitting

What You Need to Know

What is an "EJ Score"?

The term "EJ Score" means an overall evaluation of an area's environment and environmental justice indicators, as defined by MDE in regulation, including: (1) pollution burden exposure; (2) pollution burden environmental effects; (3) sensitive populations; and (4) socioeconomic factors.

The Maryland EJ Screening Tool uses three demographic indicators – minority population above 50%, poverty rate above 25% and percent of the population having limited English proficiency above 15% - to calculate a score that can be used as an indicator of susceptibility to environmental exposure. It is that score, linked to the census tract where the project is to be located, that needs to be reported to MDE as part of your permit application.

What does the application require?

The link for the Maryland EJ Tool is located on the Department's website, www.mde.maryland.gov, under Quick Links as EJ Screening Tool. At the top right, please click the first button for the MDE Screening Report. Input the address of the proposed installation in the address bar. Click on the Report button. Once the report has been generated select the print icon.

The applicant needs to include the MDE Screening Report with the EJ Score from the Maryland EJ Tool as part of the permit application upon submission. An application will not be considered complete without the report.

The applicant is encouraged to provide the Department with a discussion about the environmental exposures in the community. This will provide pertinent information about how the applicant should proceed with engaging with the community. Residents of a community with a high indicator score and a high degree of environmental exposure should be afforded broader opportunities to participate in the permit process and understand the impacts a project seeking permit approval may have on them.

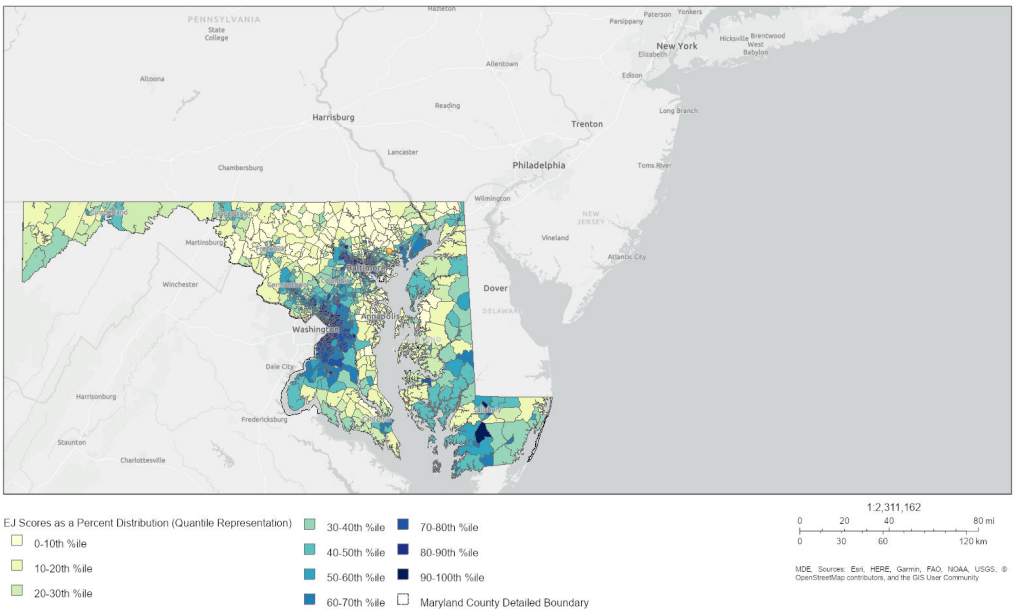
Questions

For air quality permits, please call 410-537-3230.
For water permits, please call 410-537-4145.
For land permits pertaining to Solid Waste, please call 410-537-3098.
For land permits pertaining to Oil Control, please call 410-537-3483.
For land permits pertaining to Animal Feeding Operations, please call 410-537-4423.
For land permits pertaining to Biosolids, please call 410-537-3403.

MDE EJ Screening Report

Area of Interest (AOI) Information

May 8 2023 15:54:08 Eastern Daylight Time



Summary

Name	Count	Area(ft²)	Length(ft)
EJ Scores as a Percent Distribution (Quantile Representation)	1	N/A	N/A
Active High Air Emission Facilities	0	N/A	N/A
LRP Facilities	0	N/A	N/A
Maryland Dam Locations	0	N/A	N/A
Maryland Pond Locations	0	N/A	N/A
Wastewater Discharge Facilities	0	N/A	N/A
Historic Mine Locations	0	N/A	N/A
Significant Wastewater Treatment Plants	0	N/A	N/A
Point Source Discharges	0	N/A	N/A
All Permitted Solid Waste Acceptance Facilities	0	N/A	N/A
Municipal Solid Waste Acceptance Facilities	0	N/A	N/A

EJ Scores as a Percent Distribution (Quantile Representation)

#	Geographic Area Name	Percent Minority	Percent Poverty	Percent_Limited_English_Proficiency	SocioScore Percent Tract Only	Socio Percentile (All MD)	Socio Percentile (All MD) %	Area(ft²)
1	Census Tract 4113.02, Baltimore County, Maryland	34.30	16.21	0.80	17.10	40.96	40.964%	N/A

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Air and Radiation Management Administration ▪ Air Quality Permits Program

APPLICATION FOR PROCESSING/MANUFACTURING EQUIPMENT

Permit to Construct ☒ Registration Update ☐ Initial Registration ☐

1A. Owner of Equipment/Company Name
CHARLES F. EVANS, JR / EVANS FUNERAL CHAPEL

Mailing Address
8800 HARFORD ROAD
Street Address

BALTIMORE | MD | 21234
City | State | Zip

Telephone Number
(410) 665-9444

Signature

CHARLES F. EVANS, JR. PRES | 2/20/24
Print Name and Title | Date

DO NOT WRITE IN THIS BLOCK
2. REGISTRATION NUMBER
County No. (1-2) | Premises No. (3-6)
Registration Class (7) | Equipment No. (8-11)
Data Year (12-13) | Application Date

1B. Equipment Location and Telephone Number (if different from above)
11543 PHILADELPHIA ROAD
Street Number and Street Name

WHITE MARSH, | MD | 21162 | (410) 665-9444
City/Town | State | Zip | Telephone Number

EVANS FUNERAL CHAPEL & CREMATION SERVICES - WHITE MARSH, P.A.
Premises Name (if different from above)

3. Status (A= New, B= Modification to Existing Equipment, C= Existing Equipment)

Status	New Construction Begun (MM/YY)	New Construction Completed (MM/YY)	Existing Initial Operation (MM/YY)
A	T B D	T B D	
15	16-19	20-23	20-23

4. Describe this Equipment: Make, Model, Features, Manufacturer (include Maximum Hourly Input Rate, etc.)
Matthews Environmental Solutions; PPII Plus (3.0 MMBTU/hr) / Multi-Chamber cremation unit (Unit #1)

5. Workmen's Compensation Coverage E16 4734470 00 | 4-1-24
Binder/Policy Number | Expiration Date
Company EMPLOYERS PREFERRED INS. Co.
NOTE: Before a Permit to Construct may be issued by the Department, the applicant must provide the Department with proof of worker's compensation coverage as required under Section 1-202 of the Worker's Compensation Act.

6A. Number of Pieces of Identical Equipment Units to be Registered/Permitted at this Time 1

6B. Number of Stack/Emission Points Associated with this Equipment 1

7. Person Installing this Equipment (if different from Number 1 on Page 1)

Name BARRY BURCZYK Title MID-ATLANTIC SALES REP.

Company MATTHEWS ENVIRONMENTAL SOLUTIONS

Mailing Address/Street 2045 SPRINT BLVD.

City/Town APOPKA State FL. Telephone (813) 360-9109

8. Major Activity, Product or Service of Company at this Location

CREMATION OF HUMAN REMAINS

9. Control Devices Associated with this Equipment

None [X] 24-0

Simple/Multiple Cyclone	Spray/Adsorb Tower	Venturi Scrubber	Carbon Adsorber	Electrostatic Precipitator	Baghouse	Thermal/Catalytic Afterburner	Dry Scrubber
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
24-1	24-2	24-3	24-4	24-5	24-6	24-7	24-8

Other [ ] Describe _____ 24-9

10. Annual Fuel Consumption for this Equipment

OIL-1000 GALLONS	SULFUR %	GRADE	NATURAL GAS-1000 FT^3	LP GAS-100 GALLONS	GRADE
			1 1 2 3 2		
26-31	32-33	34	35-41	42-45	

COAL- TONS	SULFUR %	ASH%	WOOD-TONS	MOISTURE %
46-52	53-55	56-58	59-63	64-65

OTHER FUELS [ ] 66-1 ANNUAL AMOUNT CONSUMED

(Specify Type) (Specify Units of Measure)

OTHER FUEL [ ] 66-2 ANNUAL AMOUNT CONSUMED

(Specify Type) (Specify Units of Measure)

1= Coke 2= COG 3=BFG 4=Other

11. Operating Schedule (for this Equipment)

Continuous Operation	Batch Process	Hours per Batch	Batch per Week	Hours per Day	Days Per Week	Days per Year
X				1 2	6	3 1 2
67-1	67-2	68-69		70-71	72	73-75

Seasonal Variation in Operation:

No Variation	Winter Percent	Spring Percent	Summer Percent	Fall Percent	(Total Seasons= 100%)
X					
76	77-78	79-80	81-82	83-84	

12. Equivalent Stack Innformation- is Exhaust through Doors, Windows, etc. Only? (Y/N) N (85)

If not, then	Height Avove Ground (FT)	Inside Diameter at Top (in)	Exit Temperature (°F)	Exit Velocity (FT/SEC)
	37 (86-88)	20 (89-91)	1100 (92-95)	20 (96-98)

NOTE:
Attach a block diagram of process/process line, indicating new equipment as reported on this form and all existing equipment, including control devices and emission points.

13. Input Materials (for this equipment only)
Is any of this data to be considered confidential? N (Y or N)

NAME	CAS NO. (IF APPLICABLE)	INPUT RATE PER HOUR	UNITS	PER YEAR	UNITS
1. HUMAN REMAINS		175	lbs/hr		
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

14. Output Materials (for this equipment)
Process/Product Stream

NAME	CAS NO. (IF APPLICABLE)	OUTPUT RATE PER HOUR	UNITS	PER YEAR	UNITS
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

15. Waste Streams - Solid and Liquid

NAME	CAS NO. (IF APPLICABLE)	OUTPUT RATE PER HOUR	UNITS	PER YEAR	UNITS
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

16. Total Stack Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter	Oxides of Sulfur	Oxides of Nitrogen
4.90	2.28	3.74
99-104	105-110	111-116

Carbon Monoxide	Volatile Organic Compounds	PM-10
3.09	0.31	4.90
177-122	123-128	129-134

17. Total Fugitive Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter	Oxides of Sulfur	Oxides of Nitrogen
135-139	140-144	145-149

Carbon Monoxide	Volatile Organic Compounds	PM-10
150-154	155-159	160-164

Method Used to Determine Emissions **(1= Estimate 2= Emission Factor 3= Stack Test 4= Other)**

TSP	SOX	NOX	CO	VOC	PM10
2	2	2	2	2	2
165	166	167	168	169	170

AIR AND RADIATION MANAGEMENT ADMINISTRATION USE ONLY

18. Date Rec'd. Local _____ **Date Rec'd. State** _____ **Return to Local Jurisdiction** **Date**_____ **By**_____

Reviewed by Local Jurisdiction Date_____ By_____ **Reviewed by State** Date_____ By_____

19. Inventory Date **Month/Year** (171-174) **Equipment Code** (175-177) **SCC Code** (178-185)

20. Annual Operating Rate (186-192) **Maximum Design Hourly Rate** (193-199) **Permit to Operate Month** (200-201) **Transaction Date (MM/DD/YR)** (202-207)

Staff Code	VOC Code	SIP Code	Regulation Code	Confidentiality
208-210	211 212	213 214	215-218	219

Point Description (220-238)

Action (239) A: Add C: Change

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SUMMARY OF DEMONSTRATIONS FOR MEETING THE AMBIENT IMPACT REQUIREMENT (26.11.15.05) AND THE T-BACT REQUIREMENT (26.11.15.06)

DO NOT WRITE IN THIS SPACE

Company Name EVANS FUNERAL CHAPEL & CREMATION SERVICE, WHITE MARSH, P.A

1. Summary of T-BACT Demonstration: List all emission reduction options considered in determining T-BACT starting with the option that reduces emissions the most. Supporting documentation **must** be attached.

Emission Reduction Option	% Emission Reduction	COSTS Capital	COSTS Annual Operating
1. > 1 Second retention time in Secondary Chamber @ 1600F	Unknown		
2. Temperature Monitor and Recorder	Unknown	3,000	100
3. No Burning of PVC plastic bags	Unknown		
4.			
5.			

2. Identify the emission reduction option selected as T-BACT and briefly explain why this is the best selection. Supporting documentation **must** be attached.

3. List screening levels and highest estimated off-site concentrations (ug/m^3) resulting from **premises-wide allowable emissions** (1) of each Toxic Air Pollutant that is covered by the regulations and discharged fromthe installation or source applying for the permit. See the General Instructions for more detail. Supporting documentation **must** be attached.

SEE DISPERSION MODEL ATTACHED

	Toxic Air Pollutant	CAS Number	SCREENING LEVEL(S) 1-HR	8-HR	Annual	OFF-SITE CONCENTRATIONS 1-HR	8-HR	Annual
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

☐ If unable to use a Screening Analysis, check the box and attach the Second Tier Analysis or Special Permit request to this form.

(1) **Premises** is defined as: "all the installations or other sources that are located on contiguous or adjacent properties and that are under the control of one person or under common control of a group of persons" (COMAR 26.11.15.01B(12)).

Allowable Emissions are defined as: "the maximum emissions a source or installation is capable of discharging after consideration of any physical or operational limitations required by this subtitle or by enforceable conditions included in an applicable air quality permit to construct, permit to operate, secretarial order, plan for compliance, consent agreement, or court order" (COMAR 26.11.15.01B(2)).

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FORM 5EP: Emission Point Data

Complete one (1) Form 5EP for EACH emission point (stack or fugitive emissions) related to the proposed installation.

Applicant Name: EVANS FUNERAL CHAPEL & CREMATION SERVICES - WHITE MARSH, P.A.

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan:
Unit 01 (Power Pak II Plus, IE43-PPII Plus)

2. Emission Point Description

Describe the emission point including all associated equipment and control devices:
Matthews Environmental Solutions - Nat Gas Fired Multiple Chamber cremation unit. No Add On Control Device

3. Emissions Schedule for the Emission Point

Continuous or Intermittent (C/I)?	I	**Seasonal Variation** Check box if none: ☒ Otherwise estimate seasonal variation:	
Minutes per hour:	60	Winter Percent	
Hours per day:	12	Spring Percent	
Days per week:	6	Summer Percent	
Weeks per year:	52	Fall Percent	

4. Emission Point Information

Height above ground (ft):	37	Length and width dimensions at top of rectangular stack (ft):	Length:	Width:	
Height above structures (ft):	5				
Exit temperature (°F):	1100	Inside diameter at top of round stack (ft):		1.67	
Exit velocity (ft/min):	1200	Distance from emission point to nearest property line (ft):		36.67 ft	
Exhaust gas volumetric flow rate (acfm):	2100	Building dimensions if emission point is located on building (ft)	Height 32	Length 124	Width 51.08

5. Control Devices Associated with the Emission Point

Identify each control device associated with the emission point and indicate the number of devices. ***A Form 6 is also required for each control device***. If none check none:

- ☒ None
- ☐ Baghouse No. ____
- ☐ Cyclone No. ____
- ☐ Elec. Precipitator (ESP) No. ____
- ☐ Dust Suppression System No. ____
- ☐ Venturi Scrubber No. ____
- ☐ Spray Tower/Packed Bed No. ____
- ☐ Carbon Adsorber No. ____
  - ☐ Cartridge/Canister
  - ☐ Regenerative
- ☐ Thermal Oxidizer No. ____
  - ☐ Regenerative
- ☐ Catalytic Oxidizer No. ____
- ☐ Nitrogen Oxides Reduction No. ____
  - ☐ Selective ☐ Non-Selective
  - ☐ Catalytic ☐ Non-Catalytic
- ☐ Other No. ____
  Specify:

FORM 5EP: Emission Point Data

6. Estimated Emissions from the Emission Point

Criteria Pollutants	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
Particulate Matter (filterable as PM10)	0.4086	0.4086	4.9	0.7649
Particulate Matter (filterable as PM2.5)	0.4086	0.4086	4.9	0.7649
Particulate Matter (condensables)	0.4086	0.4086	4.9	0.7649
Volatile Organic Compounds (VOC)	0.0261	0.0261	0.313	0.0489
Oxides of Sulfur (SOx)	0.190	0.190	2.28	0.3554
Oxides of Nitrogen (NOx)	0.3115	0.3115	3.74	0.5831
Carbon Monoxide (CO)	0.258	0.258	3.09	0.4832
Lead (Pb)				

Greenhouse Gases (GHG)	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
Carbon Dioxide (CO_2)				
Methane (CH_4)				
Nitrous Oxide (N_2O)				
Hydrofluorocarbons (HFCs)				
Perfluorocarbons (PFCs)				
Sulfur Hexafluoride (SF6)				
Total GHG (as CO_2e)				

List individual federal Hazardous Air Pollutants (HAP) below:	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)

(Attach additional sheets as necessary.)

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FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Applicant Name: EVANS FUNERAL CHAPEL - WHITE MARSH **SEE TOXYTOOL RESULTS ATTACHED**

Step 1: Quantify premises-wide emissions of Toxic Air Pollutants (TAP) from new and existing installations in accordance with COMAR 26.11.15.04. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Class I or Class II?	Screening Levels (µg/m^3)			Estimated Premises Wide Emissions of TAP			
						Actual Total Existing TAP Emissions	Projected TAP Emissions from Proposed Installation	Premises Wide Total TAP Emissions	
			1-hour	8-hour	Annual	(lb/hr)	(lb/hr)	(lb/hr)	(lb/yr)
ex. ethanol	*64175*	*II*	*18843*	*3769*	*N/A*	*0.60*	*0.15*	*0.75*	*1500*
ex. benzene	*71432*	*I*	*80*	*16*	*0.13*	*0.5*	*0.75*	*1.00*	*400*

(attach additional sheets as necessary.)

Note: Screening levels can be obtained from the Department's website (http://www.mde.maryland.gov) or by calling the Department.

Step 2: Determine which TAPs are exempt from further review. A TAP that meets either of the following Class I or Class II small quantity emitter exemptions is exempt from further TAP compliance demonstration requirements under Step 3 and Step 4.

Class II TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(a))
A Class II TAP is exempt from Step 3 and Step 4 if the Class II TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour, and any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m^3.

Class I TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(b))
A Class I TAP is exempt from Step 3 and Step 4 if the Class I TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour and 350 pounds per year, any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m^3, and any applicable annual screening level for the TAP must be greater than 1 µg/m^3.

If a TAP meets either the Class I or Class II TAP Small Quantity Emitter Exemption Requirements, no further review under Step 3 and Step 4 are required for that specific TAP.

FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Step 3: Best Available Control Technology for Toxics Requirement (T-BACT, COMAR 26.11.15.05)
In the following table, list all TAP emission reduction options considered when determining T-BACT for the proposed installation. The options should be listed in order beginning with the most effective control strategy to the least effective strategy. Attach supporting documentation as necessary.

Target Pollutants	Emission Control Option	% Emission Reduction	Costs		T-BACT Option Selected? (yes/no)
			Capital	Annual Operating	
ex. ethanol and benzene	*Thermal Oxidizer*	*99*	*$50,000*	*$100,000*	*no*
ex. ethanol and benzene	*Low VOC materials*	*80*	*0*	*$100.000*	*yes*

(attach additional sheets as necessary)

Step 4: Demonstrating Compliance with the Ambient Impact Requirement (COMAR 26.11.15.06)
Each TAP not exempt in Step 2 must be individually evaluated to determine that the emissions of the TAP will not adversely impact public health. The evaluation consists of a series of increasingly non-conservative (and increasingly rigorous) tests. Once a TAP passes a test in the evaluation, no further analysis is required for that TAP. "Demonstrating Compliance with the Ambient Impact Requirement under the Toxic Air Pollutant (TAP) Regulations (COMAR 26.11.15.06)" provides guidance on conducting the evaluation. Summarize your results in the following table. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Screening Levels ($\mu g/m^3$)			Premises Wide Total TAP Emissions		Allowable Emissions Rate (AER) per COMAR 26.11.16.02A		Off-site Concentrations per Screening Analysis ($\mu g/m^3$)			Compliance Method Used?
		1-hour	8-hour	Annual	(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	1-hour	8-hour	Annual	AER or Screen
ex. ethanol	*64175*	*18843*	*3769*	*N/A*	*0.75*	*1500*	*0.89*	*N/A*	*N/A*	*N/A*	*N/A*	*AER*
ex. benzene	*71432*	*80*	*16*	*0.13*	*1.00*	*400*	*0.04*	*36.52*	*1.5*	*1.05*	*0.12*	*Screen*

(attach additional sheets as necessary)

If compliance with the ambient impact requirement cannot be met using the allowable emissions rate method or the screening analysis method, refined dispersion modeling techniques may be required. Please consult with the Department's Air Quality Permit Program prior to conducting dispersion modeling methods to demonstrate compliance.

```
   05/11/22

   16:27:31
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 13043 ***

 Evans FH (White Marsch)


 SIMPLE TERRAIN INPUTS:
    SOURCE TYPE              =         POINT
    EMISSION RATE (G/S)      =      0.126000
    STACK HEIGHT (M)         =       11.2800
    STK INSIDE DIAM (M)      =        0.5080
    STK EXIT VELOCITY (M/S)=         6.0960
    STK GAS EXIT TEMP (K)    =      866.0000
    AMBIENT AIR TEMP (K)     =      293.0000
    RECEPTOR HEIGHT (M)      =        0.0000
    URBAN/RURAL OPTION       =         URBAN
    BUILDING HEIGHT (M)      =        9.7500
    MIN HORIZ BLDG DIM (M) =         15.5700
    MAX HORIZ BLDG DIM (M) =         37.8000

 THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
 THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS
ENTERED.


 BUOY. FLUX =     2.552 M**4/S**3;  MOM. FLUX =     0.811
M**4/S**2.

 *** FULL METEOROLOGY ***

 **********************************
 *** SCREEN AUTOMATED DISTANCES ***
 **********************************

 *** TERRAIN HEIGHT OF     0. M ABOVE STACK BASE USED FOR
```

FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
11.	0.000	0	0.0	0.0	0.0	0.00	0.00	0.00	NA
100.	36.18	6	4.0	4.1	10000.0	13.54	10.79	10.12	SS
200.	17.94	4	1.5	1.5	480.0	28.43	30.79	27.20	SS
300.	15.31	6	1.5	1.6	10000.0	28.81	31.18	20.91	SS
400.	15.24	6	1.0	1.0	10000.0	34.01	40.85	25.46	SS
500.	13.55	6	1.0	1.0	10000.0	34.01	50.21	30.39	SS
600.	11.63	6	1.0	1.0	10000.0	34.01	59.27	34.96	SS
700.	9.949	6	1.0	1.0	10000.0	34.01	68.06	39.24	SS
800.	8.570	6	1.0	1.0	10000.0	34.01	76.59	43.27	SS
900.	7.455	6	1.0	1.0	10000.0	34.01	84.89	47.09	SS
1000.	6.553	6	1.0	1.0	10000.0	34.01	92.97	50.71	SS

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 11. M:

30.	77.68	6	3.0	3.1	10000.0	11.89	3.39	5.72	SS

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED

DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

```
*********************************************
*  SUMMARY OF TERRAIN HEIGHTS ENTERED FOR   *
*    SIMPLE ELEVATED TERRAIN PROCEDURE      *
*********************************************
```

TERRAIN HT (M)	DISTANCE RANGE (M) MINIMUM	MAXIMUM
0.	11.	1000.

```
*****************************************
     *** REGULATORY (Default) ***
    PERFORMING CAVITY CALCULATIONS
  WITH ORIGINAL SCREEN CAVITY MODEL
          (BRODE, 1988)
*****************************************
```

*** CAVITY CALCULATION - 1 ***			*** CAVITY CALCULATION - 2 ***		
CONC (UG/M**3)	=	75.92	CONC (UG/M**3)	=	0.000
CRIT WS @10M (M/S)	=	5.86	CRIT WS @10M (M/S)	=	99.99
CRIT WS @ HS (M/S)	=	6.00	CRIT WS @ HS (M/S)	=	99.99
DILUTION WS (M/S)	=	3.00	DILUTION WS (M/S)	=	99.99
CAVITY HT (M)	=	11.71	CAVITY HT (M)	=	9.85
CAVITY LENGTH (M)	=	30.81	CAVITY LENGTH (M)	=	19.47
ALONGWIND DIM (M)	=	15.57	ALONGWIND DIM (M)	=	37.80

CAVITY CONC NOT CALCULATED FOR CRIT WS > 20.0 M/S. CONC SET = 0.0

****
END OF CAVITY CALCULATIONS
****

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)	
SIMPLE TERRAIN	77.68	30.	0.	
BLDG. CAVITY-1	75.92	31.	--	(DIST = CAVITY LENGTH)
BLDG. CAVITY-2	0.000	19.	--	(DIST = CAVITY LENGTH)

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

Evans Funeral Home (White Marsch) Facility Name
Evans Funeral Home Your Name
11-May-22 Date

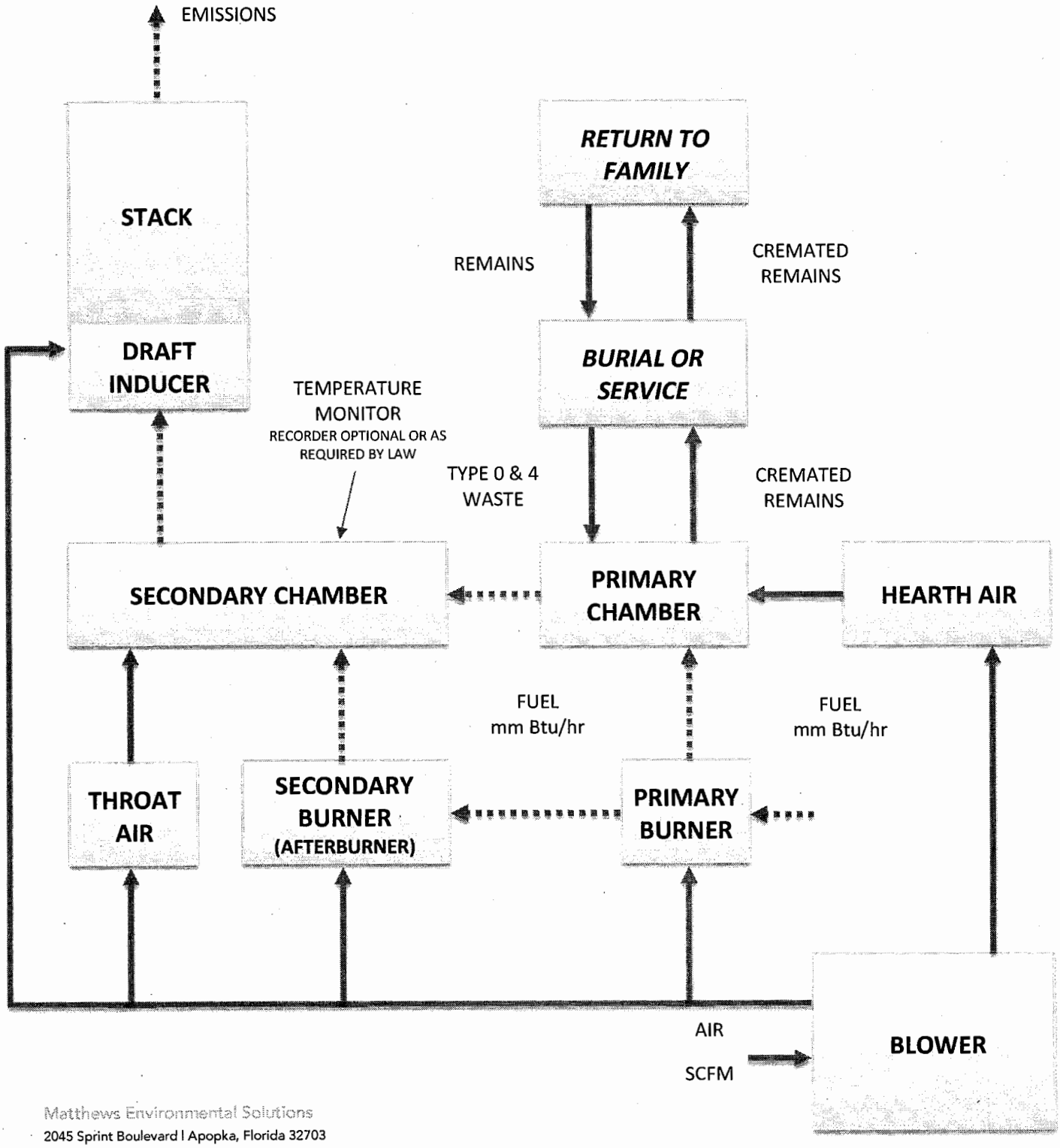
HUMAN (number)	Animal (lbs)		Equivalent
1		Cremations per Hour	1.0
4		Cremations per 8-hour	4.0
3000		Cremations per year	3000.0

77.68 Screen3 maximum concentration (1 lb/hr emission rate)
Toxytool 2015

CAS	POLLUTANT	Emission Factor (EPA FIRE) (Pounds)	Emission Factor (as number) (Pounds)	MDE Screening Level 1-HOUR (ug/m3)	MDE Screening Level 8-HOUR (ug/m3)	MDE Screening Level Annual (ug/m3)	Screen3 Concentration 1-hour (ug/m3)	Screen3 Concentration 8-hour (ug/m3)	Screen3 Concentration Annual (ug/m3)	Screen3 Concentration as % of MDE Screening Level 1-hour	Screen3 Concentration as % of MDE Screening Level 8-hour	Screen3 Concentration as % of MDE Screening Level Annual
83329	Acenaphthene	1.11E-07	1.11E-07		2.03E+01	8.00E-02	8.62E-06	3.02E-06	2.36E-07		0.00	0.00
208968	Acenaphthylene	1.22E-07	1.22E-07		2.46E+01		9.48E-06	3.32E-06	2.60E-07		0.00	
120127	Anthracene	3.24E-07	3.24E-07		2.00E+01		2.52E-05	8.81E-06	6.90E-07		0.00	
7440360	Antimony	< 3.020E-5	3.02E-05		5.00E+00		2.35E-03	8.21E-04	6.43E-05		0.02	
7440382	Arsenic	< 3.000E-5	3.00E-05		1.00E-01	2.00E-04	2.33E-03	8.16E-04	6.38E-05		0.82	31.92
7440393	Barium	2.40E-05	2.40E-05		5.00E+00		1.86E-03	6.53E-04	5.11E-05		0.01	
56553	Benzo (a) anthracene	< 9.760E-9	9.76E-09				7.58E-07	2.65E-07	2.08E-08			
50328	Benzo (a) pyrene	< 2.910E-8	2.91E-08				2.26E-06	7.91E-07	6.19E-08			
205992	Benzo (b) fluoranthene	< 1.590E-8	1.59E-08				1.24E-06	4.32E-07	3.38E-08			
191242	Benzo (g,h,i) perylene	< 2.910E-8	2.91E-08		2.00E+01		2.26E-06	7.91E-07	6.19E-08		0.00	
207089	Benzo (k) fluoranthene	< 1.420E-8	1.42E-08				1.10E-06	3.86E-07	3.02E-08			
7440417	Beryllium	1.37E-06	1.37E-06		5.00E-04	4.00E-04	1.06E-04	3.72E-05	2.92E-06		7.45	0.73
7440439	Cadmium	1.11E-05	1.11E-05		2.00E-02	6.00E-04	8.62E-04	3.02E-04	2.36E-05		1.51	3.94
7440473	Chromium	2.99E-05	2.99E-05		5.00E+00		2.32E-03	8.13E-04	6.36E-05		0.02	
18540299	Chromium (VI)	1.35E-05	1.35E-05		1.00E-01	8.00E-05	1.05E-03	3.67E-04	2.87E-05		0.37	35.91
218019	Chrysene	< 5.400E-8	5.40E-08				4.19E-06	1.47E-06	1.15E-07			
7440484	Cobalt	< 1.750E-6	1.75E-06		2.00E-01		1.36E-04	4.76E-05	3.72E-06		0.02	
7440508	Copper	2.74E-05	2.74E-05		2.00E+00		2.13E-03	7.45E-04	5.83E-05		0.04	
53703	Dibenzo(a,h) anthracene	< 1.270E-8	1.27E-08				9.87E-07	3.45E-07	2.70E-08			
206440	Fluoranthene	2.05E-07	2.05E-07		8.20E+01		1.59E-05	5.57E-06	4.36E-07		0.00	
86737	Fluorene	4.17E-07	4.17E-07		2.00E+01		3.24E-05	1.13E-05	8.87E-07		0.00	
7647010	Hydrogen chloride	7.20E-02	7.20E-02	2.98E+01	1.65E+02	7.00E-01	5.59E+00	1.96E+00	1.53E-01	18.75	1.18	21.89
7664393	Hydrogen fluoride	6.55E-04	6.55E-04	1.64E+01	4.09E+00		5.09E-02	1.78E-02	1.39E-03	0.31	0.44	
193395	Indeno(1,2,3-cd)pyrene	< 1.540E-8	1.54E-08				1.20E-06	4.19E-07	3.28E-08			
7439921	Lead	6.62E-05	6.62E-05		5.00E-01		5.14E-03	1.80E-03	1.41E-04		0.36	
7439976	Mercury	3.29E-03	3.29E-03	3.00E-01	1.00E-01		2.56E-01	8.94E-02	7.00E-03	85.19	89.45	
7439987	Molybdenum	< 1.670E-5	1.67E-05		5.00E+00		1.30E-03	4.54E-04	3.55E-05		0.01	
7440020	Nickel	3.82E-05	3.82E-05		1.00E+00		2.97E-03	1.04E-03	8.13E-05		0.10	
85018	Phenanthrene	2.29E-06	2.29E-06		9.80E+00		1.78E-04	6.23E-05	4.87E-06		0.00	
129000	Pyrene	1.62E-07	1.62E-07		2.00E+01		1.26E-05	4.40E-06	3.45E-07		0.00	
7782492	Selenium	< 4.360E-5	4.36E-05		2.00E+00		3.39E-03	1.19E-03	9.28E-05		0.06	
7440224	Silver	7.30E-06	7.30E-06		1.00E-01		5.67E-04	1.98E-04	1.55E-05		0.20	
7440280	Thallium	< 8.520E-5	8.52E-05		2.00E-01		6.62E-03	2.32E-03	1.81E-04		1.16	
7440622	Vanadium	5.79E-05	5.79E-05		5.00E-01		4.50E-03	1.57E-03	1.23E-04		0.31	
7440666	Zinc	3.53E-04	3.53E-04	1.00E+03	5.00E+02		2.74E-02	9.60E-03	7.51E-04	0.00	0.00	
	PM, filterable	8.50E-02	8.50E-02				6.60E+00	2.31E+00	1.81E-01			
	Polycyclic aromatic hydrocarbons (PAH)	3.76E-06	3.76E-06				2.92E-04	1.02E-04	8.00E-06			
1746016	Total Dioxins & Furans - TEQ balanced		1.41E-09		8.20E-04	3.00E-08	1.09E-07	3.83E-08	2.99E-09		0.00	9.98

Matthews
ENVIRONMENTAL SOLUTIONS

Cremator Process Flow Diagram



Matthews Environmental Solutions
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O: 407-886-5533 | F: 407-886-5990 | www.matthewsenvironmentalsolutions.com

SPECIFICATIONS- Model Power-Pak II Plus

1. Equipment Type	Model Power-Pak II Plus
A. Model No.	IE43-PPII Plus
B. Underwriters Laboratories Listing and File No.	87E8; MH14647
2. Dimensions	
A. Footprint	12' – 9 ½ " x 5' - 9" (3.9 m x 1.8 m)
B. Maximum Length	14' – 10 ½ " (4.53 m)
C. Maximum Width	6' -10" (2.08 m)
D. Maximum Height	9' (2.74 m)
E. Chamber Loading Opening	30 ¾ " H x 43 ½ " W (781 mm x 1105 mm)
3. Weight	28,000 lbs. (12,700 kg)
4. Utility/Air Requirements	
A. Gross Gas Input, Natural or LP Gas	3,000,000 BTU/hr. (3,165,168 kJ/h)
Running Gas Pressure, LP or Natural Gas	11 inches (279.4 mm) water column or greater
B. Electrical Supply	230 volt, 3Ø or 1Ø, 50/60 hz (others available)
C. Air Supply	2,500 cfm (70.8 standard m^3/min)
5. Incineration Capacity	175 lbs./hr. (79 kg/h)
6. Typical Loading Capacity of Waste Types	750 lbs. (340.2 kg)
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" (9.5 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, Stainless Steel, welded seams (unlined stack available)
10. Draft Nozzle Construction	Schedule 40 Stainless Steel pipe with 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

SPECIFICATIONS- Model Power-Pak II Plus

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
    - D. Outer Refractory Wall ..... 5" (127 mm) insulating block
    - E. Inner Refractory Wall ..... 4½" (114 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" (152 mm) insulating block
    - E. Inner Refractory Wall ..... 4½" (114 mm) firebrick

14. Refractory Temperature Ratings
    - A. Standard Firebrick ..... 3,100° F. (1704° C)
    - B. Insulating Firebrick ..... 2,600° F. (1427° C)
    - C. Castable Refractory (Hearth) ..... 2,550° F. (1399° C)
    - D. Castable Refractory ..... 3,100° F. (1704° C)
    - E. Insulating Block ..... 1,900° F. (1038° C)
    - F. Bonding Mortar ..... 3,200° F. (1760° C)

15. Chamber Volumes (not including external flues, stacks or chimneys)
    - A. Primary Chamber ..... 70 cubic feet (2.12 m^3)
    - B. Secondary Chamber ..... 96 cubic feet (2.72 m^3)

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 ..... 32° F. - 1,800° F. (0° C - 982° C)
    - B. Secondary Chamber ..... 1,400° F. - 1,800° F. (760°C - 982°C) (as required by Env. agency)

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.

SPECIFICATIONS- Model Power-Pak II Plus

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
    - K. Cremation Burner/Door Interlock ..... Available upon Env. Agency requirements

21. Burner Description ..... The nozzle mix burners used on this cremation equipment are industrial quality and designed for incinerator use.

22. 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.

23. Operating Panel indicators
    - 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

SPECIFICATIONS- Model Power-Pak II Plus

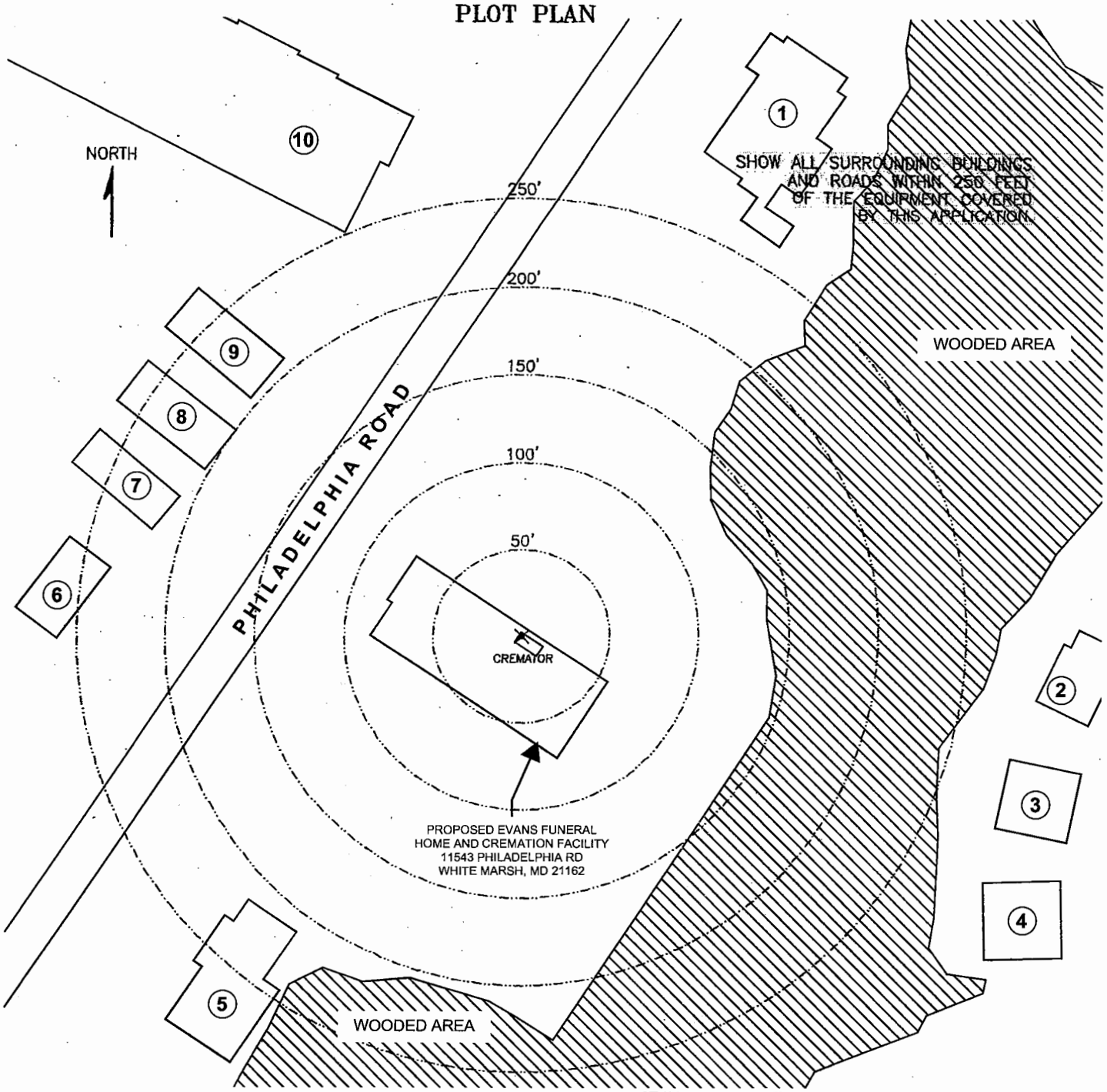
24. Automatic Timer Functions
    - A. Master Cycle ..... Included
    - B. Afterburner (Secondary Burner) ..... Included
    - C. Cremation Burner ..... Included
    - D. Low Fire Cremation Burner ..... Included
    - E. Hearth Air ..... Included
    - F. Throat Air ..... Included
    - G. Pollution Monitoring ..... Included
    - H. Afterburner (Secondary Burner) Prepurge ..... Included
    - I. Cremation Burner Prepurge ..... Included
    - J. Cool Down ..... Included

25. Exterior Finish
    - A. Primer ..... 2 coats rust inhibiting
    - B. Finish ..... 2 coats textured finish

26. 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.

27. Environmental Submittals ..... Complete technical portion of state environmental permits. Engineering calculations, technical data, existing stack test results and equipment blueprints provided.

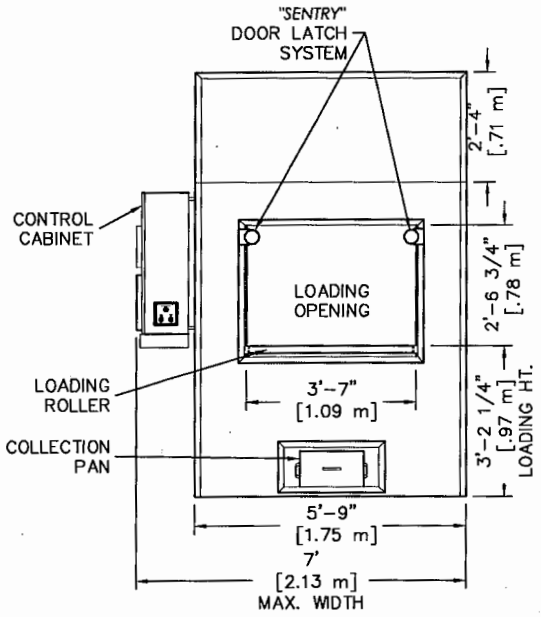
PLOT PLAN



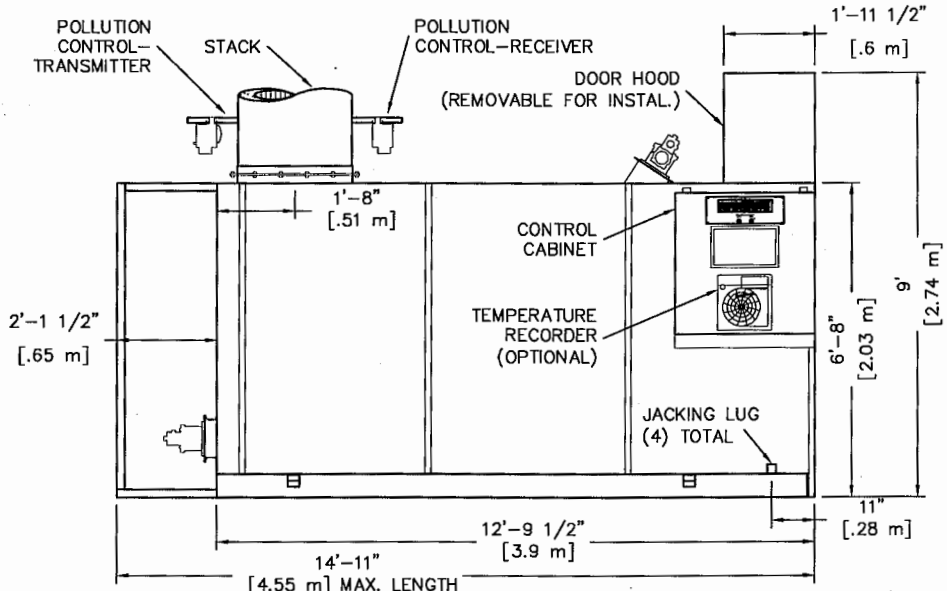
STRUCTURE	DESCRIPTION
(1)	COMMERCIAL TENANT BUILDING
(2)	SINGLE FAMILY HOME
(3)	SINGLE FAMILY HOME
(4)	SINGLE FAMILY HOME
(5)	ANIMAL HOSPITAL
(6)	SINGLE FAMILY HOME
(7)	SINGLE FAMILY HOME
(8)	SINGLE FAMILY HOME
(9)	SINGLE FAMILY HOME
(10)	SHOPPING CENTER

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.



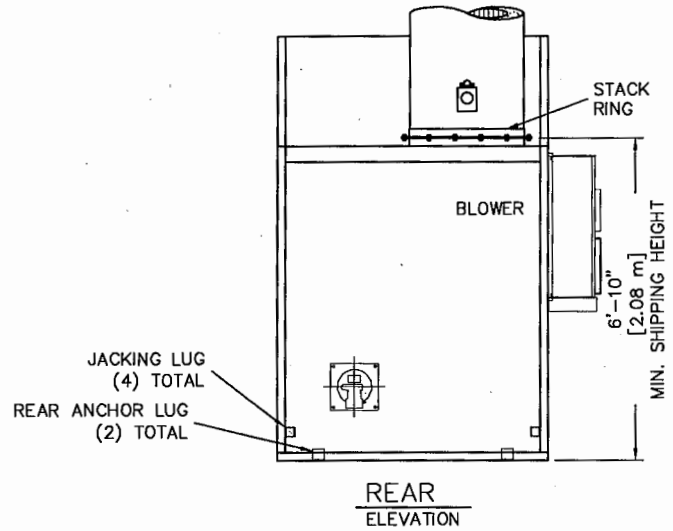
FRONT
ELEVATION



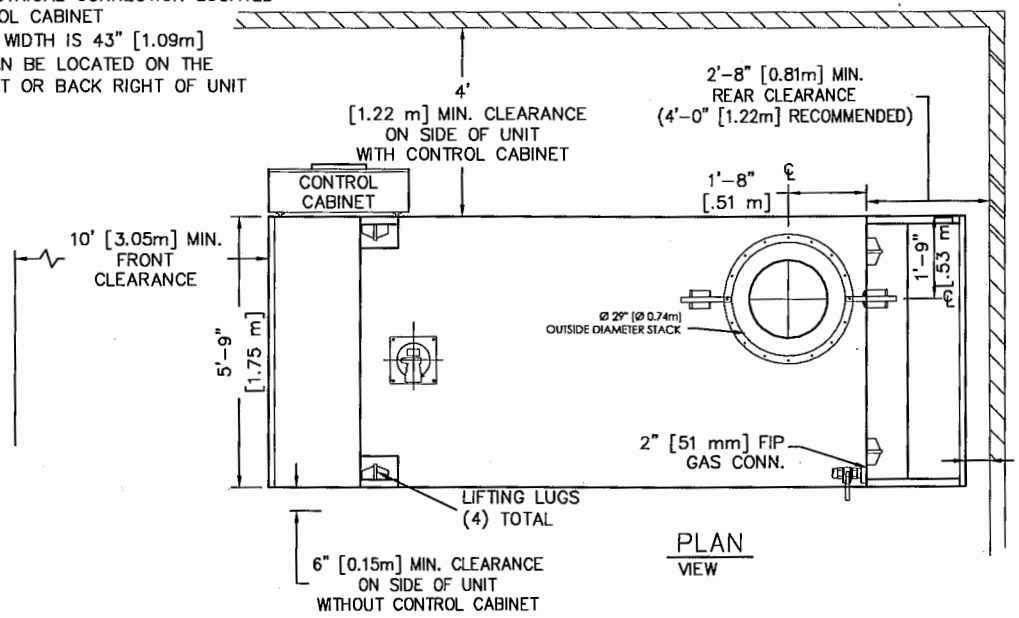
LEFT SIDE
ELEVATION

NOTES:

1) CONTROL CABINET CAN BE MOUNTED ON THE LEFT OR RIGHT SIDE, OR REMOTELY
2) MAIN ELECTRICAL CONNECTION LOCATED IN CONTROL CABINET
3) CHAMBER WIDTH IS 43" [1.09m]
4) STACK CAN BE LOCATED ON THE BACK LEFT OR BACK RIGHT OF UNIT



REAR
ELEVATION



PLAN
VIEW

Q:\ENG\MCD NEW SYSTEM\OPERATIONS\PPII+\SHOP\PPII+_09-003-004.DWG

Matthews
ENVIRONMENTAL SOLUTIONS
2045 Sprint Boulevard
Apopka, Florida 32703
USA

POWER-PAK II PLUS

PLAN & ELEVATIONS INCL: CLEARANCES, REQUIREMENTS & RECOMMENDATIONS

DRAWN BY:	JG	DATE:	02.26.2015	REVISION:		
APPROVED BY:	–	DATE:	–	1	07.21.2017	REMOVE MAIN ELEC FROM TOP OF UNIT
SCALE:	1/4" = 1'-0"	SHEET:	OF:	2	09.20.2017	CHANGED MIN. FRONT CLEAR. TO 10'
DWG FILE:						
DWG NUMBER:		$(GETVAR,??)				

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:	10+ FEET	[3.05+ m]	10 FEET	[3.05 m]
REAR:	4 FEET	[1.22 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 MES 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 11" [279 mm] W.C. FOR NATURAL GAS AND LP GAS.

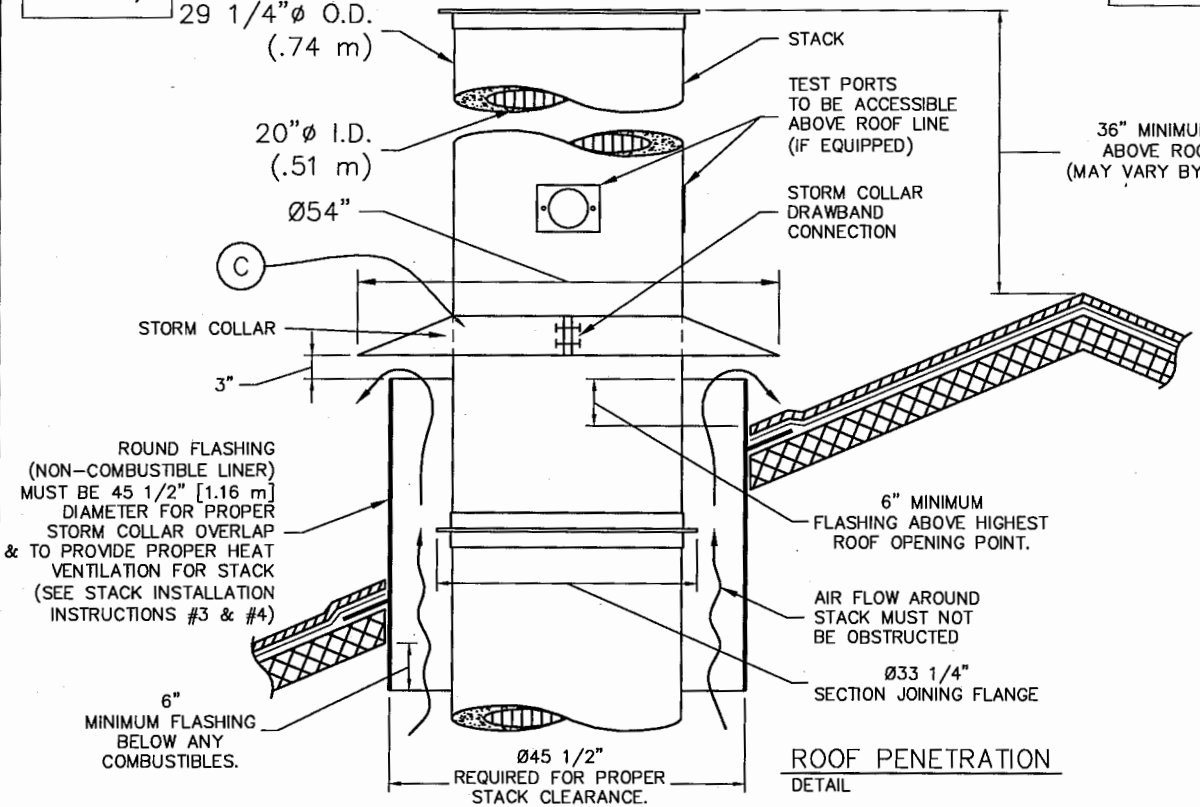
CAPACITY: 3.0 MILLION BTU/HR [3.1 MILLION KILOJOULES/HR].

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

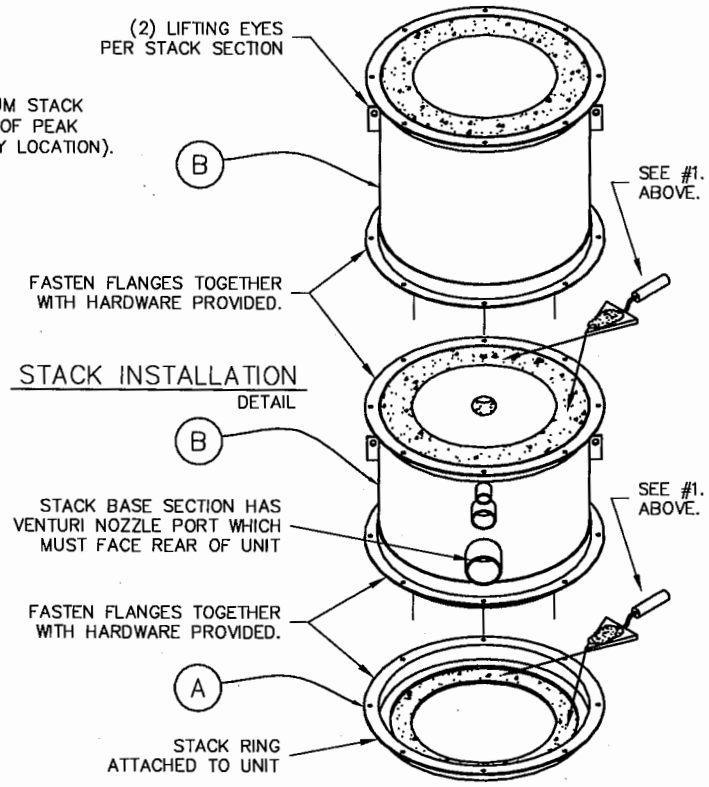
AIR: LOUVER NEAR THE REAR OF THE UNIT CAPABLE OF PASSING 2,500 CU FT/MIN [70.8 CU M/MIN] OF FREE AIR (36" X 36") [914 mm X 914 mm].

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 MES) TO THE JOINT BETWEEN THE STORM COLLAR (C) AND THE STACK (B).
4. STORM COLLAR IS FURNISHED BY MES. 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 MES REP.
6. RAIN CAP NOT REQUIRED.



ROOF PENETRATION
DETAIL



STACK INSTALLATION
DETAIL

Matthews
ENVIRONMENTAL SOLUTIONS
2045 Sprint Boulevard
Apopka, Florida 32703
USA

POWER-PAK II PLUS

STACK DETAILS, CLEARANCES & INSTALLATION INSTRUCTIONS. REFRACTORY STACK DETAIL

DRAWN BY:	JG	DATE:	03.14.2014	REVISION:	
APPROVED BY:	–	DATE:	–	1	09.20.2017 CHANGED MIN. FRONT CLEAR. TO 10'
SCALE:	1/2" = 1'-0"	SHEET:	OF:		
DWG FILE:					
DWG NUMBER:		$(GETVAR,??)			

Q:\ENG\MCD NEW SYSTEM\OPERATIONS\PPII+\SHOP\PPII+_09-006.DWG

Calculation Of Emissions

Estimated Emission Calculation

Matthews Environmental Solutions
(previously Matthews Cremation Division)
Crematory Incinerator Model IE43-PPII Plus

Total Incenerator Burn Capacity 175 lb/hr of remains (type 4) and associated containers (type 0)
Flue gas flow rate = 1175 dscfm 12 Hours/Day X 6 Days/Week X 52 Weeks/Year
(100 % Excess Air) = 3744 Hours/Year

Total Emission Rate = Incinerator Burn Rate X Emission Factor

Sulfer Dioxide (SO_2)

$$\frac{175 \text{ lb/hr} \times 2.17 \text{ lb/ton} \times 1 \text{ ton}}{2000 \text{ lbs}} = 0.190 \text{ lb/hr} = 0.355446 \text{ TPY}$$

$$\frac{0.189875 \text{ lb/hr} \times 4.54E+05 \text{ mg/lb} \times 1 \text{ ppmv}}{1175 \text{ dscfm} \times 60 \text{ min/hr} \times 0.0283 \text{ m}^3/\text{f}^3 \times 2.61 \text{ mg/m}^3} = 16.55 \text{ ppmv}$$

Nitrogen Oxide (NOx - as Nitrogen Dioxide)

$$\frac{175 \text{ lb/hr} \times 3.56 \text{ lb/ton} \times 1 \text{ ton}}{2000 \text{ lbs}} = 0.3115 \text{ lb/hr} = 0.583128 \text{ TPY}$$

$$\frac{0.3115 \text{ lb/hr} \times 4.54E+05 \text{ mg/lb} \times 1 \text{ ppmv}}{1175 \text{ dscfm} \times 60 \text{ min/hr} \times 0.028 \text{ m}^3/\text{f}^3 \times 1.88 \text{ mg/m}^3} = 38.11 \text{ ppmv}$$

Particulates (PM & PM_{10})

$$\frac{175 \text{ lb/hr} \times 4.67 \text{ lb/ton} \times 1 \text{ ton}}{2000 \text{ lbs}} = 0.408625 \text{ lb/hr} = 0.764946 \text{ TPY}$$

$$\frac{0.408625 \text{ lb/hr} \times 7.00E+03 \text{ gr/lb}}{1175 \text{ dscfm} \times 60 \text{ min/hr}} = 0.04 \text{ gr/dscf}$$

Carbon Monoxide (CO)

$$\frac{175 \text{ lb/hr} \times 2.95 \text{ lb/ton} \times 1 \text{ ton}}{2000 \text{ lbs}} = 0.258125 \text{ lb/hr} = 0.48321 \text{ TPY}$$

$$\frac{0.258125 \text{ lb/hr} \times 4.54E+05 \text{ mg/lb} \times 1 \text{ ppmv}}{1175 \text{ dscfm} \times 60 \text{ min/hr} \times 0.028 \text{ m}^3/\text{f}^3 \times 1.14 \text{ mg/m}^3} = 52.08 \text{ ppmv}$$

Hydrocarbons (TOC/VOC - methane)

$$\frac{175 \text{ lb/hr} \times 2.99E-01 \text{ lb/ton} \times 1 \text{ ton}}{2000 \text{ lbs}} = 0.026163 \text{ lb/hr} = 0.048976 \text{ TPY}$$

$$\frac{0.0261625 \text{ lb/hr} \times 4.54E+05 \text{ mg/lb} \times 1 \text{ ppmv}}{1175 \text{ dscfm} \times 60 \text{ min/hr} \times 0.0283 \text{ m}^3/\text{f}^3 \times 0.65 \text{ mg/m}^3} = 9.16 \text{ ppmv}$$

Notes:
1. Incinerator Emissions based on EPA emissions from Table 2.3-1 and 2.3-2 of AP-42 (5th Edition)
2. All conversion factors from AP-42 Appendix A.

CREMATOR MASS BALANCE

Matthews Environmental Solutions

PPII Plus

THESE CALCULATIONS HAVE BEEN PREPARED TO EVALUATE THE COMBUSTION PROCESS IN THIS UNIT.

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)	10	165

1. MASS OF PRODUCTS OF COMBUSTION FROM CONTAINER

A. COMBUSTION AIR

$$\frac{8500 \text{ BTU/LB}}{100 \text{ BTU/CF OF AIR*}} \times 0.075 \text{ LB/CF OF AIR} = 6.38 \text{ LB/LB BURNED}$$

B. COMBUSTIBLES AND WATER VAPOR FROM CHART ABOVE = 0.95 LB/LB BURNED

C. TOTAL FLUE PRODUCT MASS PER LB BURNED = 7.33 LB/LB BURNED

2. MASS OF PRODUCTS OF COMBUSTION FROM BODY

A. COMBUSTION AIR

$$\frac{1000 \text{ BTU/LB}}{100 \text{ BTU/CF OF AIR*}} \times 0.075 \text{ LB/CF OF AIR} = 0.75 \text{ LB/LB BURNED}$$

B. COMBUSTIBLES AND WATER VAPOR FROM CHART ABOVE = 0.95 LB/LB BURNED

C. TOTAL FLUE PRODUCT MASS PER LB BURNED = 1.70 LB/LB BURNED

SPECIFICATIONS	
PRIMARY BURNER FUEL CONSUMPTION (MMBTU/HR)	1
SECONDARY BURNER FUEL CONSUMPTION (MMBTU/HR)	1.2
ADDITIONAL SECONDARY AIR SUPPLIED (CFM)	200
SEC. CHAMBER OPERATING TEMPERATURE (°F)	**1600**
SECONDARY CHAMBER VOLUME (CU. FT)	96
SEC. CHAMB. CROSS-SECTIONAL AREA (SQ. FT)	2.76
FLAME PORT AREA (SQ. FT)	2.95
MIXING BAFFLES AREA (SQ. FT)	1.36

*AIR AT STANDARD CONDITIONS

3. TOTAL FLUE PRODUCTS

A. MAXIMUM PRIMARY BURNER GAS USAGE

1000000 BTU/HR x 4.8E-05 LBS/BTU = 48 LBS/HR

B. COMBUSTION AIR FOR PRIMARY BURNER

$$\frac{1000000 \text{ BTU/HR}}{100 \text{ BTU/CF AIR}} \times \frac{1}{\text{Burner}} \times 0.075 \text{ LB/CF AIR} = 750 \text{ LBS/HR}$$

C. MAXIMUM SECONDARY BURNER GAS USAGE

1200000 BTU/HR x 4.8E-05 LBS/BTU = 58 LBS/HOUR

D. COMBUSTION AIR FOR SECONDARY BURNER

$$\frac{1200000 \text{ BTU/HR}}{100 \text{ BTU/CF AIR}} \times \frac{1 \text{ Burner}}{} \times 0.075 \text{ LB/CF AIR} = 900 \text{ LBS/HOUR}$$

E. PRODUCTS FROM TYPE 0 WASTE (CONTAINER)

7.33 LBS/LB BURNED x 10 LB/HR BURN RATE = 73 LBS/HOUR

F. PRODUCTS FROM TYPE 4 WASTE (TISSUE)

1.70 LBS/LB WASTE x 165 LB/HR BURN RATE = 281 LBS/HOUR

G. ADDITIONAL SECONDARY CHAMBER COMBUSTION AIR (THROAT AIR)

12000 CF/HR* x 0.075 LB/CF AIR = 900 LBS/HOUR

H. TOTAL FLUE PRODUCTS = 3009 LBS/HOUR

2. VELOCITY AND TIME CALCULATIONS

A. SCFM CALCULATION (PRODUCTS ASSUMED TO HAVE DENSITY CLOSE TO AIR)

$$3009 \text{ LBS/HR} \times \frac{13.35 \text{ STD. CU. FT/LB}}{60 \text{ MIN/HR}} = 670 \text{ SCFM}$$

B. TOTAL PRODUCTS ACFM @ 1600 °F

$$\frac{2060 \text{ °RANKINE}}{530 \text{ °RANKINE}} \times 669.6 \text{ CFM} = 2603 \text{ ACFM}$$

C. RETENTION TIME

$$\frac{96 \text{ CU. FT}}{2603 \text{ ACFM}} \times \frac{60 \text{ SECONDS}}{1 \text{ MINUTE}} = \mathbf{2.21\ SECONDS}$$

JOHN A. OLSZEWSKI, JR.
County Executive

PAUL M. MAYHEW
Managing Administrative Law Judge
MAUREEN E. MURPHY
Administrative Law Judge

May 16, 2022

Lawrence E. Schmidt, Esq. – lschmidt@sgs-law.com
Smith, Gildea & Schmidt
600 Washington Ave, Suite 200
Towson, MD 21204-1301

RE: Petitions for Special Hearing. Special Exception and Variance
Case No. 2022-0051-SPHXA
Property: 11543 Philadelphia Road

Dear Mr. Schmidt:

Enclosed please find a copy of the decision rendered in the above-captioned matter.

Pursuant to Baltimore County Code § 32-3-401(a), "a person aggrieved or feeling aggrieved" by this Decision and Order may file an appeal to the County Board of Appeals within thirty (30) days of the date of this Order. For further information on filing an appeal, please contact the Office of Administrative Hearings at 410-887-3868.

Sincerely,

PAUL M. MAYHEW
Managing Administrative Law Judge
for Baltimore County

PMM:dlm
Enclosure
c: Charles Evans – infor@evansfuneralchapel.com
David McMillion – dmcmillion@ceiengineering.com
Utka Akbulut – uakbulut@mca.design
Judy Carroll – jcarroll@ceiengineering.com
John Hahn – jhahn@mca.design
Merrill A. Messick – mmessick@mca.design
Anna Littleton – alittleton@mca.design
Claire Fishman – cfishman@ceiengineering.com
William Shade – lschmidt@sgs-law.com
Audrey Perkins – perkinsaudrey648@gmail.com

IN RE: PETITIONS FOR SPECIAL HEARING AND SPECIAL EXCEPTION & VARIANCE	*	BEFORE THE
(11543 Philadelphia Road)	*	OFFICE OF
10th Election District	*	ADMINISTRATIVE HEARINGS
6th Council District		
19A Newport Drive, LLC	*	FOR BALTIMORE COUNTY
Legal Owner		
	*	
Petitioner		**Case No. 2022-0051-SPHXA**

* * * * * * * * *

OPINION AND ORDER

This matter comes before the Office of Administrative Hearings ("OAH") for consideration of Petitions for Special Hearing, Special Exception and Variance filed on behalf of 19A Newport Drive, LLC, legal owner ("Petitioner"). The Special Hearing request is as follows:

1. A waiver pursuant to the Baltimore County Zoning Regulations ("BCZR") § 500.7; Parts 123 and 125 of the Baltimore County Building Code ("BCBC"); and Sections §§ 32-4-107 (a), 32-4-414, 32-8-201, et seq. and § 32-8-301, et seq. of the Baltimore County Code ("BCC") to permit a portion of the parking lot in a riverine floodplain; and

2. A request for a business parking in a residential zone, as provided in BCZR § 409.8.B;

3. A modified parking plan pursuant to BCZR § 409.12.B, and

4. For such other further relief as may be deemed necessary by the Administrative Law Judge ("ALJ") for Baltimore County.

The Petition for Special Exception seeks the following:

1. A funeral establishment pursuant to Baltimore County Zoning Regulations ("BCZR") § 230.3.;

2. For such other and further relief as may be deemed necessary by the ALJ.

A Petition for a Variance was filed:

1. From Baltimore County Zoning Regulations ("BCZR") § 409.8.A.4: To permit a distance to street line for a parking space in a surface parking facility for a nonresidential use of 9.83 ft. in lieu of the permitted 10 ft.;

2. BCZR § 409.8.A.1 (and the Landscape Manual): To permit design, screening and landscaping from a side property line to the driveway of 5.5 ft. in lieu of the permitted 10 ft.;

3. BCZR § 303.2: To permit a front yard depth of 65.5 ft. in lieu of the 90.2 ft. average depth of the front yards of the immediately adjoining lots;

4. BCZR § 409.6: To permit 52 off-street parking spaces in lieu of the 53 minimum required parking spaces;

5. BCZR § 1B01.1.B.e: To permit a parking lot with a Residential Transition Area ("RTA") buffer and setback of 15.58 ft. in lieu of the required 50 ft. buffer and 75 ft. setback, and

6. For such other and further relief as may be deemed necessary by the ALJ.

Due to the ongoing COVID-19 restrictions a public WebEx hearing was conducted virtually in lieu of an in-person hearing. The Petition was properly advertised and posted. Substantive Zoning Advisory Committee ("ZAC") comments were received from the Department of Environmental Protection and Sustainability ("DEPS"), Bureau of Development Plans Review ("DPR") and the Department of Public Works and Transportation ("DPW&T"), and the Department of Planning. The agencies did not object to the relief, subject to proposed conditions, which will be incorporated into the Order.

Charles Evans appeared on behalf of the Petitioner. Lawrence Schmidt, Esquire of Smith, Gildea and Schmidt represented the Petitioner. Judith Carroll, P.E., the engineer who prepared

and sealed the Site Plan also attended, as did David McMillion of her firm. The Site Plan was admitted as Petitioner's Exhibit 1. One member of the community attended for informational purposes.

Mr. Schmidt gave an overview of the requested relief, explaining that the site is approximately 1.3 acres and it split-zoned BL, BR, and DR 3.5. It is currently a vacant lot located on Philadelphia Road (Rte. 7) in the Honeygo Area. There is a veterinary office on one side and a vacant lot owned by Asplundh Construction Co. on the other. There is a mobile home park across the street. He explained that the proposed funeral establishment is permitted by right in the BR zone by virtue of the fact that the BR zone incorporates the BM zone's permitted uses via BCZR 236.1.A. He further explained that the BL zone permits this use by Special Exception, which is why that relief has been requested. Mr. Schmidt further explained that the front setback calculations and variance are based on the setback of the veterinary office next door. He noted that Rt. 7 is a state highway and that Petitioner's engineers have been working with the State Highway Administration ("SHA") to obtain their approval, which will entail widening the road along the frontage of this parcel. He then explained that the residences to the rear of the site generate the Residential Transition Area regulations; however, the nearest residences is 142 ft. away from this tract's boundary. He urged that the RTA variance relief is therefore within the spirit and intent of the BCZR, since the RTA would not even be generated if that dwelling was an additional 8 ft. distant.

Ms. Carroll then discussed the unique features of the site, including its dimensions and topography. She also explained that there is a riverine floodplain running through a portion of the rear of the site. However, the stream that generates this floodplain is carried *under* the site by a storm sewer pipe that was installed some time ago. She further explained that the residential

developer who developed the adjacent neighborhood to the rear of the site was required to perform a full flood study to the county in order to obtain approval for that development, and that she has submitted that study to DPW&T. She stated that she does not yet know whether they will accept this study for this project or if the Petitioner will be required to perform another floodplain study, but if that is the case they are prepared to do so. She explained that the flood plain is approximately 34 acres and that approximately one acre of the proposed parking lot would be within the floodplain.

Mr. Evans then provided a "day in the life" of the proposed funeral home's operations. He explained that there will be from two to five employees there most days, depending on what type of services are taking places. Most of their services and viewings are at 10 and 11 a.m. in the morning and then from 5 to 9 p.m. in the evening. He further explained that this will be a satellite location and that his main funeral business is in Parkville. There will be a crematory at this location but there will be no embalming of other body preparation. He identified Petitioner's Exhibit 4 as the floor plans and architectural renderings for the proposed funeral home, which depict an attractive modern two story structure of quality materials. In response to questions from the community member he explained that the crematory is regulated by the State of Maryland and must also comply with the stringent regulations of the federal Environmental Protection Agency.

SPECIAL EXCEPTION

Under Maryland law, a special exception use enjoys a presumption that it is in the interest of the general welfare, and therefore, valid. *Schultz v. Pritts*, 291 Md. 1, 11 (1981). The *Schultz* standard was revisited in *Attar v. DMS Tollgate, LLC*, 451 Md. 272 (2017), where the court of appeals discussed the nature of the evidentiary presumption in special exception cases. The court again emphasized a special exception is properly denied only when there are facts and circumstances

showing that the adverse impacts of the use at the particular location in question would be above and beyond those inherently associated with the special exception use.

The record evidence establishes that the impacts of this proposed funeral establishment at this location will have no greater impacts than are inherent in the use. Further, a significant portion of the site is zoned BR, which allows this use by right. Further, I find that the requirements of BCZR § 502.1 are satisfied. The site is located on a state highway which provides ample capacity to accommodate this business, especially with the widening that SHA is requiring. I further find that it will not overcrowd the land or interfere with adequate provisions for parks, schools, sewer, water or transportation. This two story structure will have no impacts on light or air, and the use is not inconsistent with the zoning classifications. With regard to the impacts on the environment, I find that if the DPW&T approves a floodplain study for this site then those impacts will have been addressed. In sum, I find that the Special Exception is within the spirit and intent of the BCZR and, subject to resolution of the floodplain issue, will not harm the public health, safety or welfare.

VARIANCES

A variance request involves a two-step process, summarized as follows:

(1) It must be shown the property is unique in a manner which makes it unlike surrounding properties, and that uniqueness or peculiarity must necessitate variance relief; and
(2) If variance relief is denied, Petitioner will experience a practical difficulty or hardship.

Cromwell v. Ward, 102 Md. App. 691 (1995).

As described above, the site is unique in a zoning sense. It is unique dimensions as compared with the adjoining parcels and has a fairly steep grade from the front to the rear of the site. In addition, there is a floodplain along the rear portion of the site which impacts site planning. The Petitioner would suffer practical difficulty and hardship if the variance relief is denied because

they would be unable to construct the proposed building and parking lot. Again, I find that the variances are within the spirit and intent of the BCZR and will not harm the public health, safety or welfare.

SPECIAL HEARING

Section 500.7 of the BCZR allows a property owner or any "interested person" to request an interpretation of the regulations. "A request for special hearing is, in legal effect, a request for a declaratory judgment." *Antwerpen v. Baltimore County*, 163 Md. App. 194, 877 A.2d 1166, 1175 (2005). And, "the administrative practice in Baltimore County has been to determine whether the proposed Special Hearing would be compatible with the community and generally consistent with the spirit and intent of the regulations." *Kiesling v. Long*, Unreported Opinion, No. 1485, Md. App. (Sept. Term 2016).

In the instant case, the Petitioner asks for two separate forms of relief. First, that they be allowed to have commercial parking in a residential zone under BCZR § 409.8.B, or in the alternative, for a modified parking plan under BCZR § 409.12. Second, for a waiver of the floodplain regulations in order that they can construct a portion of the required parking in a riverine floodplain. As to the parking relief, I find that with the conditions set forth below, that it can be granted within the spirit and intent of the BCZR and that it will not harm the public health, safety, or welfare.

Next, with regard to the requested floodplain waiver, I find that I am without sufficient evidence to grant this relief, if such relief can ever be granted. The ZAC Comments of the DPW&T note that there is a riverine floodplain on a portion of the property and that "a riverine flood study based on ultimate land use conditions . . . must be submitted and 'Accepted for Filing.'" Petitioner's engineer explained that they have submitted a flood plain study but DPW&T has not yet approved it, and that Petitioner may, in fact, be required to perform and

submit a new study. Further, the file does not contain a "request of a department director" for a waiver, as required by BCC § 32-4-107 (a)(1). If the DPW&T ultimately approves a flood study submitted by the Petitioner, and its Director requests the grant of a waiver then I believe the proper procedure would be for Petitioner to file another Petitioner for Special Hearing to request approval of that waiver request. In sum, as discussed at the hearing, the floodplain waiver issue is not a zoning issue, it is a development issue, and given the unresolved status of the floodplain study, it is not ripe for resolution at this time.

THEREFORE, IT IS ORDERED this **16th** day of **May 2022**, by this Administrative Law Judge, that the Petition for Special Hearing as follows: (1) A waiver pursuant to the Baltimore County Zoning Regulations ("BCZR") § 500.7; Parts 123 and 125 of the Baltimore County Building Code ("BCBC"); and §§ 32-4-107 (a), 32-4-414, 32-8-201, et seq. and § 32-8-301, et seq. of the Baltimore County Code ("BCC") to permit a portion of the parking lot in a riverine floodplain; is hereby **DENIED, WITHOUT PREJUDICE.**

IT IS FURTHER ORDERED that (1) A request for business parking in a residential zone, as provided in BCZR § 409.8.B.; and (2) A modified parking plan pursuant to BCZR § 409.12.B., are hereby **GRANTED.**

IT IS FURTHER ORDERED, that the Petition for Special Exception filed for a funeral establishment pursuant to Baltimore County Zoning Regulations ("BCZR") § 230.3, is hereby **GRANTED**.

IT IS FURTHER ORDERED, that the Petition for Variance:

1. From Baltimore County Zoning Regulations ("BCZR") § 409.8.A.4: To permit a distance to street line for a parking space in a surface parking facility for a nonresidential use of 9.83 ft. in lieu of the permitted 10 ft.;

2. BCZR § 409.8.A.1 (and the Landscape Manual): To permit design, screening and landscaping from a side property line to the driveway of 5.5 ft. in lieu of the permitted 10 ft.;

3. BCZR § 303.2: To permit a front yard depth of 65.5 ft. in lieu of the 90.2 ft. average depth of the front yards of the immediately adjoining lots;

4. BCZR § 409.6: To permit 52 off-street parking spaces in lieu of the 53 minimum required parking spaces, and

5. BCZR §1B01.1.B.e: To permit a parking lot with a Residential Transition Area (" RTA") buffer and setback of 15.58 ft. in lieu of the required 50 ft. buffer and 75 ft. setback, are all hereby **GRANTED.**

The relief granted herein shall be subject to the following:

- Petitioners may apply for necessary permits and/or licenses upon receipt of this Order. However, Petitioners are hereby made aware that proceeding at this time is at their own risk until 30 days from the date hereof, during which time an appeal can be filed by any party. If for whatever reason this Order is reversed, Petitioners would be required to return the subject property to its original condition.

- Petitioners must comply with the DEPS, DPR and DPW&T ZAC comments, copies of which are attached hereto and made a part thereof.

- Other than Petitioner's company vehicles, only passenger cars (other than buses) may use the parking facilities.

- Petitioner shall submit for approval a landscape and lighting plan that complies with the Baltimore County Landscape Manual.

- After 9:30 p.m. only security lighting will be permitted.

Any appeal of this decision must be made within thirty (30) days of the date of this Order.

PAUL M. MAYHEW
Managing Administrative Law Judge
for Baltimore County

BALTIMORE COUNTY, MARYLAND

Inter-Office Correspondence

TO: Hon. Paul M. Mayhew; Managing Administrative Law Judge
Office of Administrative Hearings

FROM: Jeff Livingston, Department of Environmental Protection and Sustainability (EPS) - Development Coordination

DATE: April 4, 2022

SUBJECT: DEPS Comment for Zoning Item # 2022-0051-SPHXA
Address: 11543 Philadelphia Road
(19A Newport Drive, LLC Property)

Zoning Advisory Committee Meeting of **March 14, 2022**

X The Department of Environmental Protection and Sustainability offers the following comments on the above-referenced zoning item:

X Development of the property must comply with the Regulations for the Protection of Water Quality, Streams, Wetlands and Floodplains (Sections 33-3-101 through 33-3-120 of the Baltimore County Code).

X Development of this property must comply with the Forest Conservation Regulations (Sections 33-6-101 through 33-6-122 of the Baltimore County Code).

Additional Comments:

1. **The site plan shows an existing Forest Buffer Easement (FBE) on the property. Environmental Impact Review found no evidence there is an existing FBE on the property.**

   Reviewer: Gris Batchelder

2. **This project will require presentation to the Development Review Committee (DRC) for determination of plan process prior to issuance of any permits for Grading or Construction.**

   Reviewer: Steve Ford

BALTIMORE COUNTY, MARYLAND

INTEROFFICE CORRESPONDENCE

TO: Peter Gutwald, Director
Department of Permits, Approvals

DATE: March 24, 2022

FROM: Vishnu Desai, Supervisor for VKD 04/15/22
Bureau of Development Plans Review

SUBJECT: Zoning Advisory Committee Meeting
For March 14, 2022
Item No. 2022-0051-SPHXA

The Bureau of Development Plans Review has reviewed the subject zoning items and we have the following comments

If Special Hearing, Special Exception and Zoning Relief is granted, a Landscape Plan is required per the requirements of the Landscape Manual. A Lighting Plan is also required.

If the contributing Drainage Area is 30 acres or greater, an ultimate condition Flood Plain Sturdy is required

* * * * *

VKD: cen
cc: file

Lajuanda Whitaker

From:	Terry Curtis
Sent:	Friday, March 11, 2022 10:02 AM
To:	PAI Zoning Advisory Committee
Cc:	Peoples Counsel
Subject:	ZAC Agenda Case #2022-0051-SPHXA, Philadelphia Road #11543

Good morning,

During my review of the ZAC Agenda for the distribution meeting of March 7, 2022, I reviewed an Special Hearing for case number 2022-0051-SPHXA for 11543 Philadelphia Road.

The Department of Public Works and Transportation (DPWT) Bureau of Engineering and Construction offers the following comments:

1.) A riverine flood plain meets the qualifications of a Baltimore County regulated flood plain that flows overland with the existing stream on the property. Based on Baltimore County Code 32-4-414, development in a riverine flood plain is prohibited. A riverine flood study based on ultimate land use conditions according to the Department of Permits, Approvals and Inspections Bureau of Development Plans Review Policy Manual and Department of Public Works and Transportation Design Manual must be submitted and "Accepted for Filing" by the Department of Permits, Approvals and Inspections Bureau of Development Plans Review before the approval of the Administrative Variance for the addition. In addition, Plate DF-1 located in the DPWT Design Manual must be observed.

If you have any questions please feel free to contact me anytime.

Terry Curtis, Jr.
Engineer III
Department of Public Works and Transportation
111 West Chesapeake Avenue
Room 205
Towson, Maryland 21204
410-887-3117
tcurtis@baltimorecountymd.gov

Exceptional Customer Service
Safe and Efficient Operations
Reliable Infrastructure

MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT

SUPPLEMENT TO
DOCKET #05-23

COMPANY: Evans Funeral Chapel

LOCATION: Evans Funeral Chapel & Cremation Services - White Marsh, P.A.
11543 Philadelphia Road
White Marsh, Maryland 21162

APPLICATION: One (1) human crematory.

ITEM	DESCRIPTION
1	Notice of Tentative Determination, Public Hearing, and Opportunity to Submit Written Comments
2	Environmental Justice (EJ) Information - EJ Fact Sheet and MDE Score and Screening Report
3	Fact Sheet and Tentative Determination
4	Draft Permit to Construct and Conditions
5	Supplemental Information References
6	Privilege Log – Not Applicable

MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION

NOTICE OF TENTATIVE DETERMINATION, PUBLIC HEARING, AND OPPORTUNITY TO SUBMIT WRITTEN COMMENTS

FIRST NOTICE

The Department of the Environment, Air and Radiation Administration (ARA) has completed its review of an application for a Permit to Construct submitted by Evans Funeral Chapel on February 21, 2023, for the installation of one (1) human crematory. The proposed installation will be located at Evans Funeral Chapel & Cremation Services - White Marsh, P.A., 11543 Philadelphia Road, White Marsh, Maryland 21162.

The issuance of the Permit-to-Construct for this facility will be the subject of a Public Hearing to be held on November 12, 2024 at 6:00 pm at the New Life Baptist Church, 5501 Lloyd Avenue, White Marsh, Maryland 21162.

Pursuant to Section 1-604, of the Environment Article, Annotated Code of Maryland, the Department has made a tentative determination that the Permit-to-Construct can be issued. A final determination on issuance of the permit will only be made after review of all pertinent information presented at the public hearing or received in written comments. Copies of the Department's tentative determination, the application, the draft permit to construct with conditions, and other supporting documents are available for public inspection on the Department's website. Look for Docket #05-23 at the following link:

https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx

In accordance with HB 1200/Ch. 588 of 2022, an environmental justice (EJ) Score was determined for the census tract in which the project is located using the Maryland EJ Screening Tool. The EJ Score, expressed as a statewide percentile, was shown to be 41%. This score considers three demographic indicators, minority population above 50%, poverty rate above 25% and limited English proficiency above 15%, to identify underserved communities, and multiple environmental health indicators to identify overburdened communities. The Department's review of the environmental and socioeconomic indicators contributing to that EJ score is included in the tentative determination that is available for public inspection.

Persons who wish to make a statement concerning this application at the hearing are requested to provide the Department with a copy of their statement. In lieu of oral statements at the hearing, written comments may be submitted at the time of the hearing or to the Department no later than 30 days from the date of this notice or within 5 days after the hearing, whichever is later.

Interested persons may request an extension to the public comment period. The extension request must be submitted in writing and must be received by the Department no later than 30 days from the date of this notice or within 5 days after the hearing, whichever is later. The public comment period may only be extended one time for a 60-day period.

All requests for an extension to the public comment period and all written comments should be directed to the attention of Ms. Shannon Heafey by email to shannon.heafey@maryland.gov or by mail to the Air and Radiation Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230.

The Department will provide an interpreter for deaf and hearing impaired persons provided that a request is made for such service at least ten (10) days prior to the hearing.

Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director
Air and Radiation Administration

Maryland
Department of
the Environment

The Applicant's Guide to Environmental Justice and Permitting

What You Need to Know

This fact sheet is designed to provide guidance to applicants on incorporating environmental justice screening requirements pursuant to House Bill 1200, effective October 1, 2022.

What is Environmental Justice?

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment. House Bill 1200 adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues.

What is House Bill 1200 and what does it require?

Effective October 1, 2022, House Bill 1200 requires a person applying for a permit from the Department under §1-601 of the Environment Article of the Annotated Code of Maryland or any permit requiring public notice and participation to include in the application an EJ Score for the census tract where the applicant is seeking the permit; requiring the Department, on receiving a certain permit application to review the EJ Score; and requiring notices to include information related to EJ Scores and generally relating to environmental permits and environmental justice screenings.

What is a "Maryland EJ Tool"?

The term "Maryland EJ Tool" means a publicly available state mapping tool that allows users to: (1) explore layers of environmental justice concern; (2) determine an overall EJ score for census tracts in the state; and (3) view additional context layers relevant to an area. The MDE EJ Screening Tool is considered a Maryland EJ Tool.

What is an "EJ Score"?

The term "EJ Score" means an overall evaluation of an area's environment and environmental justice indicators, as defined by MDE in regulation, including: (1) pollution burden exposure; (2) pollution burden environmental effects; (3) sensitive populations; and (4) socioeconomic factors.

The MDE EJ Screening Tool considers three demographic indicators, minority population above 50%, poverty rate above 25% and limited English proficiency above 15%, to identify underserved communities, and multiple environmental health indicators to identify overburdened communities. The tool uses these indicators to calculate a

Final EJ Score Percentile, statewide. It is that score, linked to the census tract where the project is to be located, that needs to be reported to MDE as part of your permit application.

What does the application require?

The link for the MDE EJ Screening Tool is located on the Department's website, www.mde.maryland.gov. Click on the Environmental Justice header at the top of the Department's home page, then select EJ Screening Tool from the menu on the left. Click on Launch the EJ Screening Tool. After you open the tool, click okay on the opening screen. At the top right, please click the first button for the MDE Screening Report. Input the address of the proposed installation in the address bar. Click on the Report button. Once the report has been generated select the print icon and save it in a .pdf format.

The applicant needs to include the MDE Screening Report with the EJ Score from the MDE EJ Screening Tool as part of the permit application upon submission. An application will not be considered complete without the report.

The applicant is encouraged to provide the Department with a discussion about the environmental exposures in the community. This will provide pertinent information about how the applicant should proceed with engaging with the community. Residents of a community with a high indicator score and a high degree of environmental exposure should be afforded broader opportunities to participate in the permit process and understand the impacts a project seeking permit approval may have on them.

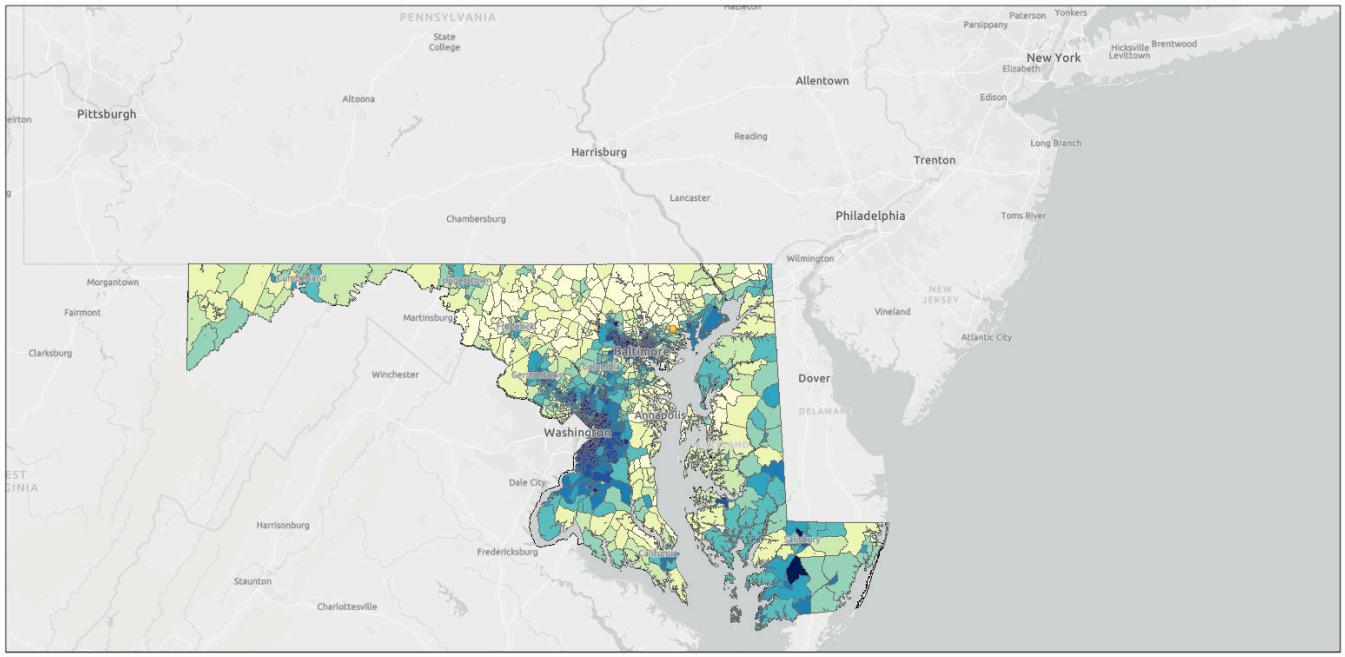
Questions

For air quality permits, please call 410-537-3230.
For water permits, please call 410-537-4145.
For land permits pertaining to Solid Waste, please call 410-537-3098. For land permits pertaining to Oil Control, please call 410-537-3483.
For land permits pertaining to Animal Feeding Operations, please call 410-537-4423.
For land permits pertaining to Biosolids, please call 410-537-3403.

MDE EJ Screening Report

Area of Interest (AOI) Information

Oct 9 2024 18:26:55 Eastern Daylight Time



EJ Scores as a Percent Distribution (Quantile Representation)

- 0-10th %ile
- 10-20th %ile
- 20-30th %ile
- 30-40th %ile
- 40-50th %ile
- 50-60th %ile
- 60-70th %ile
- 70-80th %ile
- 80-90th %ile
- 90-100th %ile
- Maryland County Detailed Boundary

1:2,311,162

0 20 40 80 mi

0 30 60 120 km

Summary

Name	Count	Area(ft²)	Length(ft)
EJ Scores as a Percent Distribution (Quantile Representation)	1	N/A	N/A
Active High Air Emission Facilities	0	N/A	N/A
LRP Facilities	0	N/A	N/A
Maryland Dam Locations	0	N/A	N/A
Maryland Pond Locations	0	N/A	N/A
Wastewater Discharge Facilities	0	N/A	N/A
Historic Mine Locations	0	N/A	N/A
Significant Wastewater Treatment Plants	0	N/A	N/A
Point Source Discharges	0	N/A	N/A
All Permitted Solid Waste Acceptance Facilities	0	N/A	N/A
Municipal Solid Waste Acceptance Facilities	0	N/A	N/A

EJ Scores as a Percent Distribution (Quantile Representation)

#	Geographic Area Name	Percent Minority	Percent Poverty	Percent_Limited_English_Proficiency	SocioScore Percent Tract Only	Socio Percentile (All MD)	Socio Percentile (All MD) %	Area(ft²)
1	Census Tract 4113.02, Baltimore County, Maryland	34.30	16.21	0.80	17.10	40.96	40.964%	N/A

MARYLAND DEPARTMENT OF ENVIRONMENT
AIR AND RADIATION ADMINISTRATION

FACT SHEET AND TENTATIVE DETERMINATION
EVANS FUNERAL CHAPEL & CREMATION SERVICES – WHITE MARSH, P.A.

PROPOSED INSTALLATION OF ONE (1) HUMAN CREMATORY

I. INTRODUCTION

The Maryland Department of the Environment (the "Department") received an application from Evans Funeral Chapel & Cremation Services – White Marsh, P.A. on February 21, 2023, for a Permit to Construct for the installation of one (1) Matthews ES PPII Plus, 175 pounds per hour, human crematory. The proposed installation will be located at 11543 Philadelphia Rd, White Marsh, MD 21162.

A notice was placed in The Baltimore Sun on May 11, 2023, and May 18, 2023, announcing a scheduled informational meeting to discuss the permit to construct application. The informational meeting was held on Wednesday, May 24, 2023, at White Marsh Volunteer Fire Company located at 10331 Philadelphia Road, White Marsh, Maryland 21162.

As required by law, all public notices were also provided to elected officials in all State, county, and municipality legislative districts located within a one-mile radius of the facility's property boundary.

The Department has reviewed the application and has made a tentative determination that the proposed facility is expected to comply with all applicable air quality regulations. A public hearing has been scheduled for November 12, 2024, at 6:00 pm at New Life Baptist Church located at 5501 Lloyd Avenue, White Marsh, Maryland, 21162, to provide interested parties an opportunity to comment on the Department's tentative determination and draft permit conditions, and/or to present other pertinent concerns about the proposed facility. Notices concerning the date, time and location of the public hearing will be published in the legal section of a newspaper with circulation in general area of the proposed facility. Interested parties may also submit written comments.

If the Department does not receive any comments that are adverse to the tentative determination, the tentative determination will automatically become a final determination. If adverse comments are received, the Department will review the comments, and will then make a final determination with regard to issuance or denial of the permit. A notice of final determination will be published in a newspaper of general circulation in the affected area. The final determination may be subject to judicial review pursuant to Section 1-601 of the Environment Article, Annotated Code of Maryland.

II. PROPOSED INSTALLATION

Evans Funeral Chapel & Cremation Services is proposing to install one (1) 175 pounds per hour, Matthews ES PPII Plus human crematory, fired with natural gas, at their facility.

The Matthews ES PPII Plus human crematory will be equipped with a secondary combustion chamber capable of meeting at least a 1.0 second retention time and a minimum operating temperature of 1600 ºF. The Matthews ES PPII Plus human crematory must be equipped with temperature sensors and monitors to continuously measure and record the temperature of the secondary combustion chamber. The unit must also be equipped with an opacity sensor interlocked with a control system that continuously monitors the stack gases for visible emissions during operation and adjusts cremation operations to prevent visible emissions from exiting the crematory stack. Exhaust gases must be vented out of a stack at a height of at least 37 feet from the ground to ensure proper dispersion of exhaust gases.

III. APPLICABLE REGULATIONS

The proposed installation is subject to all applicable Federal and State air quality control regulations, including, but not limited to the following:

(a) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.

(b) COMAR 26.11.02.13A(1), which requires that the Permittee obtain from the Department, and maintain and renew as required, a valid State permit-to-operate.

(c) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in the submittals.

(d) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

(e) COMAR 26.11.08.04B, which prohibits visible emissions other than uncombined water.

Exceptions. The requirements do not apply to emissions during start-up, or adjustments or occasional cleaning of control equipment if:

(1) The visible emissions are not greater than 40 percent opacity; and

(2) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

(f) COMAR 26.11.08.05B(2)(a), which limits the concentration of particulate matter in any exhaust gases to not more than 0.10 grains per standard cubic foot of dry exhaust gas.

(g) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

(h) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions would unreasonably endanger human health.

IV. GENERAL AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) for six (6) criteria pollutants, i.e., sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, ozone, and lead. The primary standards were established to protect public health, and the secondary standards were developed to protect against non-health effects such as damage to property and vegetation.

The Department utilizes a statewide air monitoring network, operated in accordance with EPA guidelines, to measure the concentrations of criteria pollutants in Maryland's ambient air. The measurements are used to project statewide ambient air quality, and currently indicate that Baltimore County complies with the NAAQS for sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, and lead.

Ground level ozone continues to present a problem for the entire Baltimore metropolitan area, which is classified as a non-attainment area for ozone. The primary contributors to the formation of ozone are emissions of oxides of nitrogen, primarily from combustion equipment, and emissions of Volatile Organic Compounds (VOC) such as paint solvents and gasoline vapors. Baltimore County is included in the non-attainment area for ozone.

With regard to toxic air pollutants (TAPs), screening levels (i.e., acceptable ambient concentrations for toxic air pollutants) are generally established at 1/100 of allowed worker exposure levels (TLVs)[1]. The Department has also developed additional screening levels for carcinogenic compounds. The additional screening levels are established such that continuous exposure to the subject TAP at the screening level for a period of 70 years is expected to cause an increase in lifetime cancer risk of no more than 1 in 100,000.

[1] TLVs are threshold limit values (exposure limits) established for toxic materials by the American Conference of Governmental Industrial Hygienists (ACGIH). Some TLVs are established for short-term exposure (TLV – STEL), and some are established for longer-term exposure (TLV – TWA), where TWA is an acronym for time-weight average.

V. ENVIRONMENTAL JUSTICE ANALYSIS

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment.

The Maryland General Assembly passed HB 1200, effective October 1, 2022, that adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues. In accordance with HB 1200/Ch, 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the proposed source is located using the Maryland EJ Screening Tool. The EJ Score, expressed as a statewide percentile, was shown to be 41, which the Department has verified. This score considers three demographic indicators, minority population above 50%, poverty rate above 25% and limited English proficiency above 15%, to identify underserved communities. Multiple environmental health indicators are used to identify overburdened communities.

To account for other sources of pollution surrounding the proposed source, the Department conducted an additional EJ Score analysis to evaluate the impact of other sources located within 1 mile of the proposed source. The highest EJ Score in a census tract located within 1 mile of the proposed source, expressed as a statewide percentile, was shown to be 41.

An EJ Score of 41 indicates that the proposed installation is located in an area that is not disproportionately impacted by sources of pollution or at a higher risk of health problems from environmental exposures than other areas in Maryland. The Department has reviewed the air quality impacts from this proposed installation and has determined that the proposed installation will meet all applicable air quality standards.

VI. COMPLIANCE DEMONSTRATION AND ANALYSIS

The proposed installation must comply with all State imposed emissions limitations and screening levels, as well as the NAAQS. The Department has conducted an engineering and air quality review of the application. The emissions were projected based on U.S. EPA-approved emissions factors for crematory operations. The conservative U.S. EPA's SCREEN3 model was also used to project the maximum ground level concentrations from the proposed installation, which were then compared to the screening levels and the NAAQS.

A. **Estimated Emissions** - The maximum emissions of criterial pollutants from the proposed installation, including the proposed installation, are listed in Table I.

B. **Compliance with National Ambient Air Quality Standards -** The maximum ground level concentrations for particulate matter, sulfur dioxide, oxides of nitrogen, carbon monoxide, and volatile organic compounds based on the emissions from the proposed installation, are listed in column 2 of Table II. The combined impact of the proposed installation, and the ambient background concentration for each pollutant shown in column 3 of Table II, is less than the NAAQS for each pollutant shown in column 4.

C. **Compliance with Air Toxics Regulations** – The premises wide toxic air pollutants of concern that would be emitted from this facility are listed in column 1 of Table III. The predicted maximum off-site ambient concentrations of these toxic air pollutants are shown in column 4 of Table III, and in each case the maximum concentration is less than the corresponding screening level for the toxic air pollutant shown in column 3.

VII. TENTATIVE DETERMINATION

Based on the above information, the Department has concluded that the proposed installation will comply with all applicable Federal and State air quality control requirements. In accordance with the Administrative Procedure Act, the Department has made a tentative determination to issue the Permit to Construct.

Enclosed with the tentative determination is a copy of the draft Permit to Construct.

TABLE I
PROJECTED MAXIMUM EMISSIONS FROM THE PROPOSED INSTALLATION

POLLUTANT	PROJECTED MAXIMUM EMISSIONS	
	(lbs/day)	(tons/year)
Oxides of Nitrogen (NO_X) (includes Nitrogen Dioxide – NO_2)	3.4	0.62
Carbon Monoxide (CO)	2.8	0.51
Sulfur Dioxide (SO_2)	0.99	0.18
Total Particulate Matter (PM) (includes PM-10 and PM-2.5)	1.5	0.27
Volatile Organic Compounds (VOC)	1.4	0.26

TABLE II
PROJECTED IMPACT OF EMISSIONS OF CRITERIA POLLUTANTS FROM THE PROPOSED INSTALLATION ON AMBIENT AIR QUALITY

POLLUTANTS	**MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS CAUSED BY EMISSIONS FROM PROPOSED PROCESS ($\mu g/m^3$)**	**BACKGROUND AMBIENT AIR CONCENTRATIONS ($\mu g/m^3$)***	**NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) ($\mu g/m^3$)**
Nitrogen Dioxide (NO_2)	1-hour max → 11.0 annual avg → 0.9	1-hour max → 92 annual avg → 26	1-hour max → 188 annual avg →100
Carbon Monoxide (CO)	1-hour max → 9.1 8-hour max→ 6.4	1-hour max.→ 1,260 8-hour max.→ 2,980	1-hour max.→ 40,000 8-hour max.→ 10,000
Sulfur Dioxide (SO_2)	1-hour max → 3.2 24-hour max → 1.3	1-hour max → 30 24-hour max → 5	1-hour max → 196 24-hour max → 366
Particulate Matter (PM_{10})	24-hour max → 1.9	24-hour max.→ 101	24-hour max.→ 150

*Background concentrations were obtained from Maryland air monitoring stations as follows:

NO_2 → Monitoring Station in Lochearn, Baltimore County
PM_{10} → Monitoring Station in Old Town, Baltimore City
CO and SO_2 → Monitoring Station in Essex, Baltimore County

TABLE III
PREDICTED MAXIMUM OFF-SITE AMBIENT CONCENTRATIONS FOR TOXIC AIR POLLUTANTS EMITTED FROM THE FACILITY

Toxic Air Pollutant	PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)	SCREENING LEVELS ($\mu g/m^3$)	PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS ($\mu g/m^3$)
Acenaphthene (CAS No. 83329)	0.0000001	20.3 (8-hr)	0.000002 (8-hr)
Acenaphthylene (CAS No. 208968)	0.0000008	24.6 (8-hr)	0.000009 (8-hr)
Acetaldehyde (CAS No. 75070)	0.00016	450 (1-hr) 2300 (8-hr) 5 (annual)	0.013 (1-hr) 0.0019 (8-hr) 0.0002 (annual)
Anthracene (CAS No. 120127)	0.0000004	20 (8-hr)	0.000004 (8-hr)
Antimony (CAS No. 7440360)	0.000035	5 (8-hr)	0.0004 (8-hr)
Arsenic (CAS No. 7440382)	0.00007	0.1 (8-hr) 0.002 (annual)	0.0056 (8-hr) 0.00084 (annual)
Barium (CAS No. 7440393)	0.00003	5 (8-hr)	0.0004 (8-hr)
Benzo (g,h,i) perylene (CAS No. 191242)	0.00000005	20 (8-hr)	0.0000006 (8-hr)
Beryllium (CAS No. 7440417)	0.000003	0.0005 (8-hr) 0.004 (annual)	0.00004 (8-hr) 0.000004 (annual)
Cadmium (CAS No. 7440439)	0.00026	0.02 (8-hr) 0.006 (annual)	0.003 (8-hr) 0.0003 (annual)
Chromium (CAS No. 7440473)	0.000035	5 (8-hr)	0.0004 (8-hr)
Chromium VI (CAS No. 18540299)	0.000016	0.01 (8-hr) 0.0008 (annual)	0.0002 (8-hr) 0.00002 (annual)
Cobalt (CAS No. 7440484)	0.000016	0.2 (8-hr)	0.0002 (8-hr)
Copper (CAS No. 7440508)	0.000034	2 (8-hr)	0.0004 (8-hr)
Fluoranthene (CAS No. 206440)	0.00000024	82 (8-hr)	0.000003 (8-hr)
Fluorene (CAS No. 86737)	0.0000005	20 (8-hr)	0.000006 (8-hr)
Formaldehyde (CAS No. 50000)	0.00004	20.3 (8-hr) 0.8 (annual)	0.0005 (8-hr) 0.00005 (annual)
Hydrogen Chloride (CAS No. 7647010)	0.35	29.8 (1-hr) 165 (8-hr)	27.4 (1-hr) 4.11 (8-hr)
Hydrogen Fluoride (CAS No. 7664393)	0.0013	16.4 (1-hr) 4.1 (8-hr)	0.1 (1-hr) 0.016 (8-hr)
Lead (CAS No. 7439921)	0.0018	0.5 (8-hr)	0.02 (8-hr)
Mercury (CAS No. 7439976)	0.0062	0.1 (8-hr)	0.072 (8-hr)
Molybdenum (CAS No. 7439987)	0.00002	5 (8-hr)	0.00023 (8-hr)
Naphthalene (CAS No. 91203)	0.00008	786 (1-hr) 524 (8-hr)	0.0062 (1-hr) 0.0009 (8-hr)

Toxic Air Pollutant	PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)	SCREENING LEVELS ($\mu g/m^3$)	PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS ($\mu g/m^3$)
Nickel (CAS No. 7440020)	0.000045	1 (8-hr)	0.0005 (8-hr)
Phenanthrene (CAS No. 85018)	0.000003	9.8 (8-hr)	0.00003 (8-hr)
Pyrene (CAS No. 129000)	0.0000002	20 (8-hr)	0.000002 (8-hr)
Selenium (CAS No. 7782492)	0.00005	2 (8-hr)	0.0006 (8-hr)
Silver (CAS No. 7440224)	0.0000085	0.1 (8-hr)	0.0001 (8-hr)
Thallium (CAS No. 7440280)	0.0001	0.2 (8-hr)	0.0012 (8-hr)
Vanadium (CAS No. 7440622)	0.000068	0.5 (8-hr)	0.0008 (8-hr)
Zinc (CAS No. 7440666)	0.000475	1000 (1-hr) 500 (8-hr)	0.037 (1-hr) 0.0055 (8-hr)
Total Dioxins and Furans (CAS No. 174016)	0.0000000016	0.0008 (8-hr)	0.00000002 (8-hr)

The values represent maximum facility-wide emissions of toxic air pollutants during any 1-hour period of facility operation.

The values are based on worst-case emissions from the proposed facility and were predicted by EPA's SCREEN3 model, which provides conservative estimations concerning the impact of pollutants on ambient air quality.

Wes Moore
Governor

Serena McIlwain
Secretary

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[X] Construction Permit [ ] Operating Permit

PERMIT NO. 005-2978-1-0211

DATE ISSUED

PERMIT FEE $1,500.00 (Paid)

EXPIRATION DATE In accordance with COMAR 26.11.02.04B

LEGAL OWNER & ADDRESS

Evans Funeral Chapel
8800 Harford Road
Baltimore, MD 21234

Attn: Mr. Charles Evans Jr., Owner

SITE

Evans Funeral Chapel & Cremation Services – White Marsh, P.A.
11543 Philadelphia Road
White Marsh, Maryland 21162
AI # 177675

SOURCE DESCRIPTION

Human crematory. This permit authorizes the installation of one (1) human crematory.

This permit serves as a temporary permit to operate for a period of 180 days after initial start-up of the crematory.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Administration

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This permit covers the following registered installation:

ARA Registration No.	Description	Installation Date
005-2978-1-0211	Matthews ES PPII Plus, 175 pounds per hour, human crematory	To be installed

Part A – General Provisions

(1) The following Air and Radiation Administration (ARA) permit-to-construct application forms and supplemental information are incorporated into this permit by reference:

(a) Application for Processing or Manufacturing Equipment (Form 5) received February 21, 2023.

(b) Emission Point Data (Form 5EP) received February 21, 2023.

(c) Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration (Form 5A & 5T) received February 21, 2023.

(d) Supplemental Information, emissions calculations, screen modeling results, plot plan, environmental justice report, flow diagram, and equipment specifications received February 21, 2023.

If there are any conflicts between representations in this permit and representations in the applications, the representations in the permit shall govern. Estimates of dimensions, volumes, emissions rates, operating rates, feed rates and hours of operation included in the applications do not constitute enforceable numeric limits beyond the extent necessary for compliance with applicable requirements.

(2) Upon presentation of credentials, representatives of the Maryland Department of the Environment ("MDE" or the "Department"), the Baltimore County Health Department, and the Baltimore County Department of Environmental Protection & Sustainability shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee's property and permitted to:

(a) inspect any construction authorized by this permit;

(b) sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;

(c) inspect any monitoring equipment required by this permit;

(d) review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit; and

(e) obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit.

(3) The Permittee shall notify the Department prior to increasing quantities and/or changing the types of any materials referenced in the application or limited by this permit. If the Department determines that such increases or changes constitute a modification, the Permittee shall obtain a permit-to-construct prior to implementing the modification.

(4) Nothing in this permit authorizes the violation of any rule or regulation or the creation of a nuisance or air pollution.

(5) If any provision of this permit is declared by proper authority to be invalid, the remaining provisions of the permit shall remain in effect.

(6) Subsequent to issuance of this permit, the Department may impose additional and modified requirements that are incorporated into a State permit-to-operate issued pursuant to COMAR 26.11.02.13.

Part B – Applicable Regulations

(1) This source is subject to all applicable federal air pollution control requirements.

(2) This source is subject to all applicable federally enforceable State air pollution control requirements including, but not limited to, the following regulations:

(a) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.

(b) COMAR 26.11.02.04B, which states that a permit to construct or an approval expires if, as determined by the Department:

(i) Substantial construction or modification is not commenced within 18 months after the date of issuance of the permit or approval, unless the Department specifies a longer period in the permit or approval;

(ii) Construction or modification is substantially discontinued for a period of 18 months after the construction or modification has commenced; or

(iii) The source for which the permit or approval was issued is not completed within a reasonable period after the date of issuance of the permit or approval.

(c) COMAR 26.11.02.09A, which requires that the Permittee obtain a permit-to-construct if an installation is to be modified in a manner that would cause changes in the quantity, nature, or characteristics of emissions from the installation as referenced in this permit.

(d) COMAR 26.11.08.04B, which prohibits visible emissions other than uncombined water.

Exceptions. The requirements do not apply to emissions during start-up, or adjustments or occasional cleaning of control equipment if:

(i) The visible emissions are not greater than 40 percent opacity; and

(ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

(e) COMAR 26.11.08.05B(2)(a), which limits the concentration of particulate matter in any exhaust gases to not more than 0.10 grains per standard cubic foot of dry exhaust gas.

(3) This source is subject to all applicable State-only enforceable air pollution control requirements including, but not limited to, the following regulations:

(a) COMAR 26.11.02.13A(1), which requires that the Permittee obtain from the Department, and maintain and renew as required, a valid State permit-to-operate.

(b) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in such submittals.

(c) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

(d) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

(e) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions would unreasonably endanger human health.

Part C – Construction Conditions

(1) Except as otherwise provided in this part, the Matthews ES PPII Plus, 175 pounds per hour, human crematory shall be constructed in accordance with specifications included in the incorporated applications and in accordance with the specifications provided by the vendor and manufacturer.

(2) The crematory shall be designed to limit particulate matter emissions to no more than 0.10 grains per standard cubic foot dry, adjusted to 12 percent carbon dioxide.

(3) The crematory shall be equipped with a secondary combustion chamber capable of achieving a retention time of at least 1.0 second, and an operating temperature of at least 1600 ºF.

(4) The crematory shall be equipped with temperature sensors and recorders to continuously monitor and record the temperature of the secondary combustion chamber during operation.

(5) The crematory shall be equipped with an opacity sensor interlocked with a control system that continuously monitors the stack gases for visible emissions during operation and adjusts cremation operations to prevent visible emissions from exiting the crematory stack.

(6) The stack height of the crematory stack shall be at least 37 feet above the ground.

Part D – Operating and Monitoring Conditions

(1) Except as otherwise provided in this part, the Matthews ES PPII Plus, 175 pounds per hour, human crematory authorized by this permit shall be operated in accordance with specifications included in the application and any operating procedures recommended by equipment vendors unless the Permittee obtains from the Department written authorization for alternative operating procedures.

(2) The Permittee shall comply with the following operational limitations unless the Permittee can demonstrate, to the satisfaction of the Department, that compliance with all applicable air quality regulations and standards can be achieved at other conditions:

(a) The Permittee shall only cremate human remains in the Matthews ES PPII Plus, 175 pounds per hour, crematory.

(b) The Permittee shall not cremate more than 2 human remains in the crematory during any 8-hour period.

(c) The Permittee shall not combust any halogenated plastics, including polyvinyl chloride (PVC) body bags or PVC pipes.

(d) The Permittee shall not combust any hazardous waste, or hospital, medical, and infectious waste as defined in COMAR 26.11.08.01B(18).

(3) Prior to the initiation of cremation in the primary chamber, the secondary chamber shall be preheated until the gases leaving the secondary chamber attain a temperature of at least 1600 ºF.

(4) While remains are being cremated, the secondary chamber temperature shall be maintained at 1600 ºF or higher.

(5) While remains are cremated, the temperature of the flue gases at the outlet of the secondary combustion chambers shall be continuously monitored and recorded on a chart recorder or other continuous record keeping device. The records shall show the dates and times of all recorded temperature readings.

(6) The Permittee shall develop and maintain an Operations and Maintenance (O&M) Plan for the crematory that incorporates all of the following:

(a) Information that is sufficient to demonstrate that air emissions from the crematory can be expected to comply with all applicable regulatory requirements during periods of normal operation. Examples of types of information that could be included to support the required demonstrations would be design criteria, vendor specifications and performance guarantees, approved computer modeling studies, and results of testing programs in which approved test methods and procedures were utilized.

(b) Procedures that provide for proper operation and maintenance of the crematory and associated operating and monitoring equipment.

(c) Provisions for periodic monitoring of operating parameters as necessary to determine that the crematory is functioning properly.

(d) Descriptions of procedures to be followed and corrective actions to be taken when monitoring information indicates that the crematory is not functioning properly.

(e) Provisions for developing written or printable electronic records that will show whether prescribed operating, maintenance and monitoring procedures are consistently followed, and whether timely and appropriate corrective actions are taken when malfunctions occur.

Part E – Notifications and Testing

(1) The Permittee shall notify the Department of the initial start-up date of the one (1) Matthews ES PPII Plus, 175 pounds per hour, human crematory within fifteen (15) days after the date.

(2) Within 120 days after initial startup, the Permittee shall conduct a modified EPA Method 9 opacity observation of the crematory stack to demonstrate compliance with the requirements of COMAR 26.11.08.04B, to assess the effectiveness the crematory's opacity sensor, and to determine when operations require adjustments to ensure compliance.

(a) The opacity observation shall be conducted by an observer certified in accordance with the Method 9 standards and procedures in Appendix A-4 to 40 CFR, Part 60.

(b) The opacity observation shall be conducted for a one-hour period while human remains are cremated.

(c) During the opacity observation, the Permittee shall make adjustments to the opacity sensor equipment and crematory operations as needed to ensure that visible emissions do not occur during normal operation.

(d) If visible emissions are observed during the opacity observation, the Permittee shall take corrective actions to bring the crematory into compliance.

(e) At least 30 days prior to conducting the modified Method 9 opacity observation, the Permittee shall notify the Department of the intended date of the observation to allow for an inspector to be present.

(f) Within 30 days after conducting a modified Method 9 opacity observation, the Permittee shall submit the results and a description of adjustments or corrective actions made during the observations to the Department.

(3) Within 120 days after initial startup, the Permittee shall conduct performance tests on the crematory stack to determine emissions of particulate matter (as PM-10) using EPA Method 5 and emissions of metals using EPA Method 29.

(a) At least 30 days prior to the performance tests, the Permittee shall submit to the Department a test protocol for review and approval.

(b) Within 60 days following the performance tests, the Permittee shall submit to the Department the performance test results.

(c) In lieu of conducting performance tests, the Permittee may submit Method 5 and Method 29 performance test results conducted within the last five years by a third-party stack testing company on an identical crematory unit.

(d) The performance test results shall include a demonstration of compliance with applicable particulate matter and metal toxic air pollutant requirements.

Part F – Record Keeping and Reporting

(1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information for the crematory:

(a) Charts or other continuous records of the flue gas temperature at the outlet of the secondary combustion chamber. The records must show the date and start time of each cremation. The recording chart, or other method, shall be replaced as necessary in order to ensure that there is no overlapping of any portion of the recording of cremation cycles.

(b) A daily log of the following information:

(i) the date and start time of each cremation;

(ii) the number of human remains cremated per 8 hour period;

(iil) the approximate weight of each charge;

(iv) the duration of each cremation cycle;

(c) Records of all maintenance performed on the crematory including the date and description of the maintenance performed and actions taken.

(d) A copy of the required Operations and Maintenance (O&M) Plan.

(e) Records of the results of all modified Method 9 opacity observations and Method 5 and Method 29 performance tests.

(2) The Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, records necessary to support annual certifications of emissions and demonstrations of compliance for toxic air pollutants. Such records shall include, if applicable, the following:

(a) mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each registered source of emissions;

(b) accounts of the methods and assumptions used to quantify emissions;

(c) all operating data, including operating schedules and production data, that were used in determinations of emissions;

(d) amounts, types, and analyses of all fuels used;

(e) any records, the maintenance of which is required by this permit or by State or federal regulations, that pertain to the operation and maintenance of continuous emissions monitors, including:

(i) all emissions data generated by such monitors;

(ii) all monitor calibration data;

(iii) information regarding the percentage of time each monitor was available for service; and

(iv) information concerning any equipment malfunctions.

(f) information concerning operation, maintenance, and performance of air pollution control equipment and compliance monitoring equipment, including:

(i) identifications and descriptions of all such equipment;

(ii) operating schedules for each item of such equipment;

(iii) accounts of any significant maintenance performed;

(iv) accounts of all malfunctions and outages; and

(v) accounts of any episodes of reduced efficiency.

(g) limitations on source operation or any work practice standards that significantly affect emissions; and

(h) other relevant information as required by the Department.

(3) The Permittee shall submit to the Department by April 1 of each year a certification of emissions for the previous calendar year. The certifications shall be prepared in accordance with requirements, as applicable, adopted under COMAR 26.11.01.05 – 1 and COMAR 26.11.02.19D.

(a) Certifications of emissions shall be submitted on forms obtained from the Department.

(b) A certification of emissions shall include mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each of the facility's registered sources of emissions.

(c) The person responsible for a certification of emissions shall certify the submittal to the Department in the following manner:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(4) The Permittee shall submit to the Department by April 1 of each year a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. Such analysis shall include either:

(a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

(b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

(5) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Administration.

Part G – Temporary Permit-to-Operate Requirements

(1) This permit-to-construct shall also serve as a temporary permit-to-operate that confers upon the Permittee authorization to operate the one (1) Matthews ES PPII Plus, 175 pounds per hour, human crematory for a period of up to 180 days after initiating operation.

(2) During the effective period of the temporary permit-to-operate the Permittee shall operate the new installation as required by the applicable terms and conditions of this permit-to-construct, and in accordance with operating procedures and recommendations provided by equipment vendors.

(3) The Permittee shall submit to the Department an application for a State permit-to-operate no later than 60 days prior to expiration of the effective period of the temporary permit-to-operate.

(4) During the effective period of the temporary permit-to-operate the Permittee shall comply with all required notification, opacity observation, and performance test requirements as specified in Part E of this permit.

(5) With the application for a State permit-to-operate, the Permittee shall submit a proposed Operations and Maintenance Plan required by Part D(6) of this permit for review and approval by the Department.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION

SUPPLEMENTAL INFORMATION REFERENCES

The Code of Maryland Regulations (COMAR) is searchable by COMAR citation at the following Division of State Documents website:
https://dsd.maryland.gov/Pages/COMARHome.aspx

The Code of Federal Regulations (CFR), including New Source Performance Standards (NSPS) at 40 CFR, Part 60 and National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR, Parts 61 and 63, is searchable by CFR citation at the following U.S. Government Publishing Office website:
http://www.ecfr.gov

Information on National Ambient Air Quality Standards (NAAQS) is located at the following U.S. Environmental Protection Agency (EPA) website:
https://www.epa.gov/criteria-air-pollutants/naaqs-table

Information on Maryland's Ambient Air Monitoring Program is located at the following Maryland Department of the Environment website:
http://mde.maryland.gov/programs/Air/AirQualityMonitoring/Pages/index.aspx

Information on the U.S. EPA's Screen3 computer model and other EPA-approved air dispersion models is located at the following U.S. EPA website:
http://www.epa.gov/scram001/dispersion_screening.htm

Information on the U.S. EPA TANKS Emission Estimation Software is located at the following U.S. EPA website:
http://www.epa.gov/ttn/chief/software/tanks/index.html

Information on the U.S. EPA Emission Factors and AP-42 is located at the following U.S. EPA website:
https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors

Information on the 2020 National Emissions Inventory Technical Support Document for Cremation:
https://www.epa.gov/system/files/documents/2023-04/NEI2020_TSD_Section29_Cremation.pdf

Calculation of emissions from Matthews Environmental Solutions.