

MARYLAND DEPARTMENT OF THE ENVIRONMENT

**AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT**

DOCKET #06-26

COMPANY: Donald V. Borgwardt Funeral Home, P.A.

LOCATION: 4400 Powder Mill Road, Beltsville, Maryland, 20705

APPLICATION: Installation of one (1) Matthews Environmental Solutions Power Pak II Plus Human Crematory rated at 175 pounds per hour.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Notice of Application and Informational Meeting
2	Permit to Construct Application Forms – Form 5 Application for Processing or Manufacturing Equipment, Form 5EP: Air Toxic Emission Point Data, Form 5T: Air Toxics Summary Sheet, Emissions Calculations, Emissions Modeling Data, Plot Plan, Process Flow Diagram, and Vendor Specifications.
3	MDE Score and Screening Report
4	Evidence of Zoning Approval

**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 Donald V. Borgwardt Funeral Home, P.A. on April 1, 2026, for the installation of one (1) Matthews Environmental Solutions Power Pak II Plus Human Crematory rated at 175 pounds per hour. The proposed installation will be located at 4400 Powder Mill Road, Beltsville, Maryland, 20705.

Copies of the application, the MDE EJ Screening Tool 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 06-26). 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.

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. The EJ Score, expressed as a statewide percentile, was shown to be 83.3 which the Department has verified. This score represents a combined measure of pollution and the potential vulnerability of a population to the effects of pollution.

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. The meeting will be held on August 18, 2026, from 6:00 to 7:30 PM at the Beltsville Branch of Prince George's County Memorial Library System, 4319 Sellman Road, Beltsville, Maryland, 20705. You may also participate virtually. Please register to attend using the following link:

<https://forms.gle/UzGvp6DF9WPKSu496>

Registered attendees will receive instructions on how to join the virtual meeting using a computer and internet connection or telephone on the day of the meeting.

This meeting location is accessible to individuals with disabilities as defined under the Americans with Disabilities Act (ADA). Individuals who require reasonable accommodation or a language interpreter to participate in the meeting should contact the Department by email at mde.accommodations@maryland.gov or call 410-537-3152 (MD Relay TTY: 7-1-1) at least 5 business days in advance of the meeting.

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

Christopher R. Hoagland, Director
Air and Radiation Administration



AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

OWNER OF EQUIPMENT/PROCESS	
COMPANY NAME:	Donald V Borgwardt Funeral Home PA
COMPANY ADDRESS:	4400 Powder Mill Road Beltsville, MD 20705
LOCATION OF EQUIPMENT/PROCESS	
PREMISES NAME:	Donald V Borgwardt Funeral Home PA
PREMISES ADDRESS:	4400 Powder Mill Road Beltsville, MD 20705
CONTACT INFORMATION FOR THIS PERMIT APPLICATION	
CONTACT NAME:	Donald V Borgwardt
JOB TITLE:	Owner
PHONE NUMBER:	c) 301-651-9585 o) 301-937-1707
EMAIL ADDRESS:	dvborg4@yahoo.com
DESCRIPTION OF EQUIPMENT OR PROCESS	
Installation of new Matthews Environmental Solutions IE43-PPII Plus human cremation unit	

Application is hereby made to the Department of the Environment for a Permit to Construct for the following equipment or process as required by the State of Maryland Air Quality Regulation, COMAR 26.11.02.09.

Check each item that you have submitted as part of your application package.

- ☐ Application package cover letter describing the proposed project
- ☒ Complete application forms (Note the number of forms included or NA if not applicable.)
 - No. 1 Form 5
 - No. 1 Form 5T
 - No. 1 Form 5EP
 - No. Form 6
 - No. Form 10
 - No. Form 11
 - No. Form 41
 - No. Form 42
 - No. Form 44
- ☒ Vendor/manufacture specifications/guarantees
- ☐ Evidence of Workman's Compensation Insurance
- ☒ Process flow diagrams with emission points
- ☐ Site plan including the location of the proposed source and property boundary
- ☒ Material balance data and all emissions calculations
- ☐ Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.
- ☐ Certificate of Public Convenience and Necessity (CPCN) waiver documentation from the Public Service Commission ⁽¹⁾
- ☐ Documentation that the proposed installation complies with local zoning and land use requirements ⁽²⁾

⁽¹⁾ Required for emergency and non-emergency generators installed on or after October 1, 2001 and rated at 2001 kW or more.

⁽²⁾ Required for applications subject to Expanded Public Participation Requirements.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration • Air Quality Permits Program
1800 Washington Boulevard • Baltimore, Maryland 21230
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FORM 5 APPLICATION FOR PROCESSING OR MANUFACTURING EQUIPMENT/PROCESS

☒ Permit to Construct ☐ Registration Update ☐ Initial Registration

1. Owner Information

Owner Name: Donald V Borgwardt
Owner Street Address: 4400 Powder Mill Road
City/State/Zip Code: Beltsville, Maryland 20705

2. Location of Equipment/Process

☐ Check if different from above. If checked, complete the following:

Premises Name:
Premises Street Address:
City/State/Zip Code:

3. Contact Information

Contact Name: Donald V Borgwardt
Job Title: owner
Phone Number: c) 301-651-9585 o) 301-937-1707
Email Address:

4. Workers' Compensation Coverage Information

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 Workers' Compensation Act.

Company Name: Employers Preferred Insurance Company
Binder/Policy Number: EIG568010100 Expiration Date: 09/01/2026

5. Person Installing Equipment/Process (if different from 1 above)

Installer Name and Title:
Installer Company Name:
Installer Street Address:
City/State/Zip Code:
Phone Number:

6. Description of Major Activity, Product, or Service of Company at this Location (include applicable SIC code)

Cremation of human remains. SIC: 7261

7. Installation Type

☒ New Equipment/Process
☐ Modification to Existing Equipment/Process
☐ Existing Equipment/Process

8. Projected Construction/Existing Operation Dates

Projected Construction Start Date: TBD
Projected Construction End Date: TBD
Projected Operating Date of New/Modified Equipment/Process: TBD
Existing Equipment/Process Initial Operating Date:

9. Description of the Equipment/Process (include make, model, manufacturer, rated capacity, as applicable)

Matthews Environmental Solutions; PPII Plus (3.0 MMBTU/hr) / Multi-Chamber cremation unit (Unit #1)

10. Supplemental Equipment/Process Information

Number of Pieces of Identical Equipment Units to be Registered/Permitted at this Time:

1

Number of Stack/Emission Points Associated with the Equipment/Process: 1

Fugitive Emissions Source? ☐ Yes ☒ No

Note: Complete a Form 5EP for each stack/emission point or fugitive discharge area.

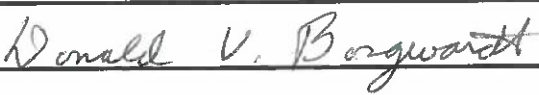
11. Control Devices Associated with this Equipment/Process

Note: Complete a Form 6 for each control device.

☒ None ☐ Baghouse/Fabric Filter ☐ Cyclone ☐ Electrostatic Precipitator
☐ Dust Suppression ☐ Venturi Scrubber ☐ Adsorption System ☐ Spray Tower/Packed Bed
☐ Oxidizer ☐ Nitrogen Oxides Reduction ☐ Other, specify:

12. Fuel Consumption for this Equipment/Process

☒ Natural Gas 11232 1000 cubic feet/year ☐ Coal (attach fuel specifications) _____ tons/year
☐ Propane/LP Gas _____ 100 gallons/year ☐ Wood (attach fuel specifications) _____ tons/year
☐ Distillate Fuel Oil _____ 1000 gallons/year ☐ Other (describe): _____
☐ Residual Fuel Oil _____ 1000 gallons/year (specify units)

13. Operating Schedule for this Equipment/Process					
☒ Continuous Operation ☐ Batch Process _____ hours/batch _____ batches/week 12 _____ operating hours/day 6 _____ operating days/week 312 _____ operating days/year			Seasonal Variation? ☐ Yes ☒ No If yes, complete the following: _____ Winter Percent _____ Spring Percent _____ Summer Percent _____ Fall Percent Total Seasons = 100% operating time		
14. Input Materials and Usage Rates (attach additional materials as necessary)					
Name of Input Material	CAS No. (if applicable)	Input Rate Per Hour	Identify Unit of Measure	Input Rate Per Year	Identify Unit of Measure
Human Remains		175	lbs/hr		
15. Output Materials and Production Rates (attach additional materials as necessary)					
Name of Output Material or Product	CAS No. (if applicable)	Output Rate Per Hour	Identify Unit of Measure	Output Rate Per Year	Identify Unit of Measure
16. Waste Streams - Solid and Liquid (attach additional materials as necessary)					
Name of Waste Material or Waste Product	CAS No. (if applicable)	Waste Generation Rate Per Hour	Identify Unit of Measure	Waste Generation Rate Per Year	Identify Unit of Measure
17. Total Stack Emissions for this Equipment/Process			18. Total Fugitive Emissions for this Equipment/Process		
Nitrogen Oxides	3.74	lbs/operating day	Nitrogen Oxides	_____	lbs/operating day
Carbon Monoxide	3.09	lbs/operating day	Carbon Monoxide	_____	lbs/operating day
Sulfur Oxides	2.28	lbs/operating day	Sulfur Oxides	_____	lbs/operating day
Particulate Matter (PM-10)	4.9	lbs/operating day	Particulate Matter (PM-10)	_____	lbs/operating day
Particulate Matter (PM-2.5)	4.9	lbs/operating day	Particulate Matter (PM-2.5)	_____	lbs/operating day
Volatile Organic Compounds	0.31	lbs/operating day	Volatile Organic Compounds	_____	lbs/operating day
Greenhouse Gases (CO _{2e})	_____	lbs/operating day	Greenhouse Gases (CO _{2e})	_____	lbs/operating day
19. Required Documents					
☒ Air Quality Permit to Construct Application Checklist - Include all required items on the checklist with the Form 5 application ☐ Check this box if this application includes confidential information and submit one confidential copy of the application and one copy with all confidential information removed.					
20. Responsible Party Certification Statement					
"I CERTIFY UNDER PENALTY OF LAW THAT THE INFORMATION SUBMITTED IN THIS REQUEST FOR COVERAGE 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."					
Responsible Party Signature					Date
					3-26-2026
Printed Name and Title					
Donald V Borgwardt / Owner					
For ARA Use Only					
Date Received:					
Date Reviewed:					
Reviewed By:					
ARA Premises Number:					
Associated ARA Registration Number or Numbers:					

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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: Donald V Borgwardt

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):	33ft	Length and width dimensions at top of rectangular stack (ft):	Length:		Width:	
Height above structures (ft):						
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 22ft.	Length 52ft.	Width 32ft.	

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	☐ Thermal Oxidizer	No. _____
☐ Baghouse	☐ Regenerative	
☐ Cyclone	☐ Catalytic Oxidizer	No. _____
☐ Elec. Precipitator (ESP)	☐ Nitrogen Oxides Reduction	No. _____
☐ Dust Suppression System	☐ Selective	☐ Non-Selective
	☐ Catalytic	☐ Non-Catalytic
☐ Venturi Scrubber	☐ Other	No. _____
☐ Spray Tower/Packed Bed	Specify:	
☐ Carbon Adsorber		
☐ Cartridge/Canister		
☐ Regenerative		

[illegible]

(Attach additional sheets as necessary.)

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

Applicant Name: Donald V Borgwardt

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		
			1-hour	8-hour	Annual	Actual Total Existing TAP Emissions (lb/hr)	Projected TAP Emissions from Proposed Installation (lb/hr)	Premises Wide Total TAP Emissions (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/m³.

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/m³, and any applicable annual screening level for the TAP must be greater than 1 µg/m³.

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 (µg/m ³)			Premises Wide Total TAP Emissions		Allowable Emissions Rate (AER) per COMAR 26.11.16.02A		Off-site Concentrations per Screening Analysis (µg/m ³)			Compliance Method Used? AER or Screen
		1-hour	8-hour	Annual	(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	1-hour	8-hour	Annual	
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.

03/10/26

14:29:01

*** SCREEN3 MODEL RUN ***

*** VERSION DATED 13043 ***

Borgwardt FH

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
EMISSION RATE (G/S) = 0.126000
STACK HEIGHT (M) = 10.0600
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) = 6.7100
MIN HORIZ BLDG DIM (M) = 9.7500
MAX HORIZ BLDG DIM (M) = 15.8500

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
19.	0.000	0	0.0	0.0	0.0	0.00	0.00	0.00	NA
100.	26.73	4	3.5	3.5	1120.0	16.11	15.69	13.79	SS
200.	15.60	4	1.5	1.5	480.0	32.51	30.79	27.20	SS
300.	11.12	4	1.0	1.0	320.0	46.93	45.36	40.23	SS
400.	11.80	6	1.0	1.0	10000.0	39.01	40.85	25.30	SS
500.	11.47	6	1.0	1.0	10000.0	39.01	50.21	30.24	SS
600.	10.36	6	1.0	1.0	10000.0	39.01	59.27	34.82	SS
700.	9.145	6	1.0	1.0	10000.0	39.01	68.06	39.11	SS
800.	8.049	6	1.0	1.0	10000.0	39.01	76.59	43.15	SS
900.	7.111	6	1.0	1.0	10000.0	39.01	84.89	46.97	SS
1000.	6.323	6	1.0	1.0	10000.0	39.01	92.97	50.60	SS

SIMPLE TERRAIN

67.64

30.

0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

Facility Name
Borgwardt FH
Permit Writer

XXXXXX Premises Wide	
1	Animal (lbs)
3	Cremations per 8-hour
3285.0	Cremations per year

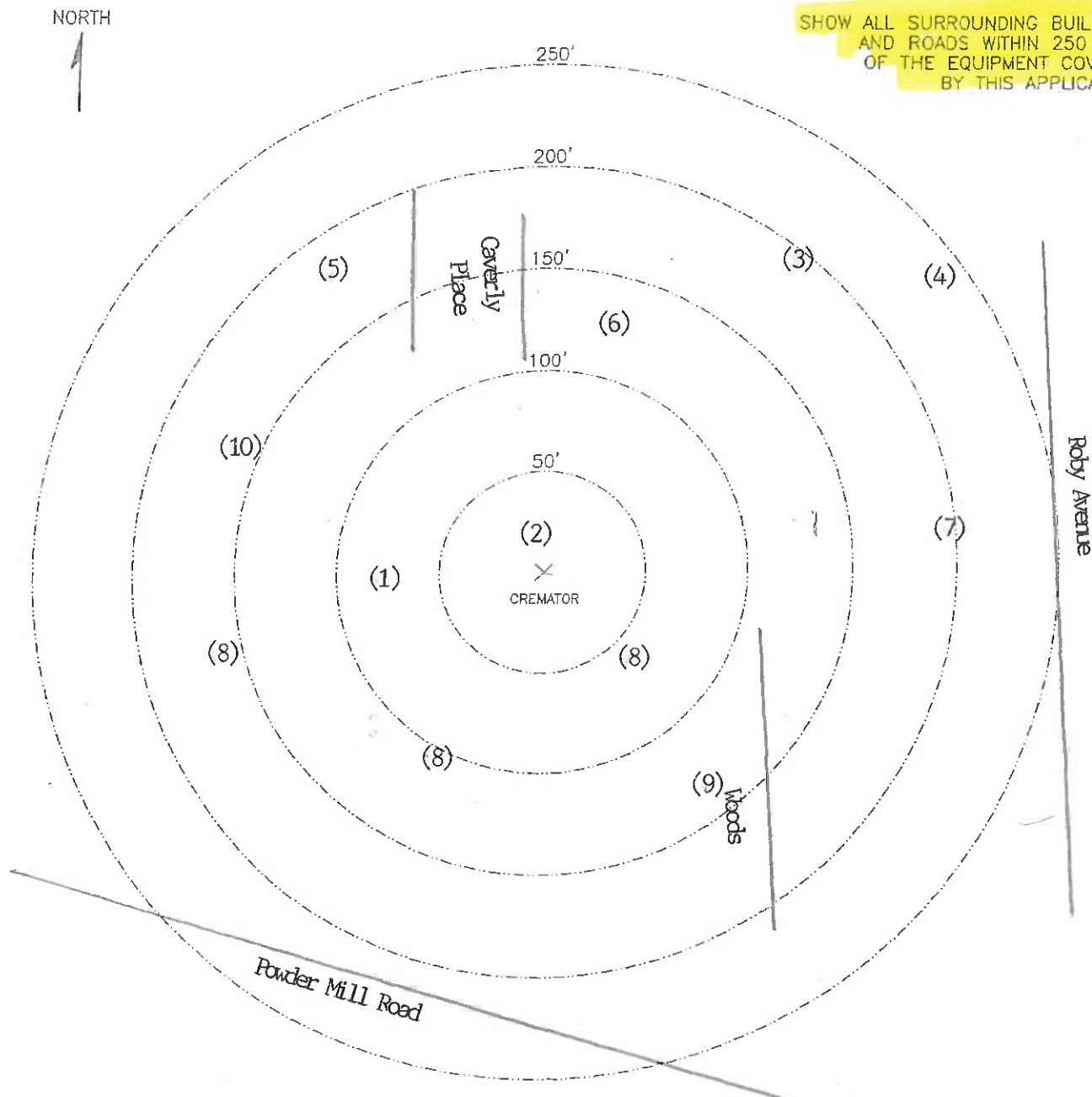
Screen3 maximum concentration (1 lb/hr emission rate) from crematory stacks
Screen3 maximum concentration (1 lb/hr emission rate) from pet crematory stack
Screen3 maximum concentration (1 lb/hr emission rate) from old animal crematory stack

CAS	POLLUTANT	Emission Factor (EPA PIRE) (cremations)	Emission Factor (as number) (cremations)	MDE			Screen3			Screen3			Screen3			SME?	AER?	Emissions (lb/hr)	Emission g (lb/y)
				Level	Screening	MDE	Level	Screening	MDE	Level	Screening	MDE	Level	Screening	MDE				
				8-HOUR	Annual	Annual	1-hour	Annual	Annual	1-hour	Annual	8-hour	Annual	1-hour	Annual				
				(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)	(g/m3)				
83329	Acenaphthene	1.11E-07	1.11E-07	2.00E+01	4.50E+02	2.00E+01	7.31E-06	1.97E-06	2.25E-07	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	1.11E-07	1.11E-07
208968	Acenaphthylene	6.73E-07	6.73E-07	2.00E+01	4.50E+02	2.00E+01	4.55E-05	1.19E-05	1.37E-06	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	6.73E-07	1.11E-06
75070	Acetaldhyde	0.000139	0.000139	2.00E+01	4.50E+02	2.00E+01	9.40E-03	2.47E-03	2.82E-04	0.00	0.00	0.00	0.00	0.00	0.00	YES	YES	1.39E-04	2.28E-04
120127	Anthracene	3.24E-07	3.24E-07	2.00E+01	4.50E+02	2.00E+01	2.19E-05	5.75E-06	6.57E-07	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	3.24E-07	5.32E-07
740360	Antimony	< 3.020E-5	3.02E-05	5.00E+00	1.00E-01	2.00E-03	2.04E-03	5.36E-04	6.13E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	3.02E-05	4.96E-05
740382	Arsenic	6.17E-05	6.17E-05	1.00E-01	2.00E-03	1.00E-01	4.17E-03	1.10E-03	1.25E-04	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	6.17E-05	1.01E-04
740393	Barium	2.90E-05	2.90E-05	5.00E+00	1.00E-01	2.00E-03	1.76E-03	4.62E-04	5.28E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	2.90E-05	4.27E-05
58553	Benzo (a) anthracene	0.00000013	0.00000013	2.00E+01	4.50E+02	2.00E+01	8.79E-06	2.31E-06	2.64E-07	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	1.30E-07	2.14E-07
50328	Benzo (a) pyrene	0.00000066	0.00000066	2.00E+01	4.50E+02	2.00E+01	4.46E-05	1.17E-05	1.34E-06	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	6.90E-07	1.08E-06
205992	Benzo (b) fluoranthene	0.00000018	0.00000018	2.00E+01	4.50E+02	2.00E+01	1.22E-06	3.20E-07	3.65E-08	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	1.80E-08	2.86E-08
191242	Benzo (g,h,i) perylene	4.4055E-08	4.4055E-08	2.00E+01	4.50E+02	2.00E+01	2.98E-06	7.82E-07	8.94E-08	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	4.41E-08	7.24E-08
207089	Benzo (k) fluoranthene	< 1.420E-8	1.42E-08	2.00E+01	4.50E+02	2.00E+01	9.60E-07	2.52E-07	2.88E-08	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	1.42E-08	2.33E-08
7440417	Beryllium	2.60E-06	2.60E-06	5.00E-04	1.00E-01	1.00E-01	1.76E-04	4.62E-05	5.28E-06	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	2.60E-06	4.27E-06
7440439	Cadmium	2.47E-04	2.47E-04	2.00E-02	6.00E-03	2.00E-02	1.67E-02	4.39E-03	5.01E-04	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	2.47E-04	4.06E-04
18540299	Chromium (VI)	2.99E-05	2.99E-05	5.00E+00	1.00E-01	1.00E-01	2.02E-03	5.31E-04	6.07E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	2.99E-05	4.91E-05
218019	Chrysene	1.40E-05	1.40E-05	2.00E-01	8.00E-04	2.00E-01	9.47E-04	2.49E-04	2.84E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	1.40E-05	2.30E-05
7440484	Cobalt	< 5.400E-8	5.40E-08	2.00E-01	8.00E-04	2.00E-01	3.65E-06	9.59E-07	1.10E-07	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	5.40E-08	8.87E-08
7440508	Copper	2.93E-05	2.93E-05	2.00E+00	8.00E-03	2.00E+00	1.69E-03	4.20E-04	4.76E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	2.93E-05	4.81E-05
53703	Dibenz(a,h) anthracene	0.0000136	0.0000136	2.00E+01	4.50E+02	2.00E+01	8.20E-05	2.15E-05	2.76E-06	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	1.36E-08	2.23E-08
208440	Fluoranthene	1.38E-06	1.38E-06	8.20E+01	2.00E-01	8.20E+01	1.39E-06	3.64E-06	4.16E-07	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	1.38E-06	2.23E-06
88737	Fluorene	4.17E-07	4.17E-07	2.00E+01	4.50E+02	2.00E+01	2.82E-05	7.40E-06	8.46E-07	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	4.17E-07	6.85E-07
50000	Formaldehyde	0.000034	0.000034	2.00E+01	4.50E+02	2.00E+01	2.30E-03	6.04E-04	6.90E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	3.02E-01	4.96E-01
7647010	Hydrogen chloride	3.02E-01	3.02E-01	2.88E-01	1.64E-01	1.64E-01	2.04E+01	5.30E+00	6.13E-01	68.47	6.47	0.00	0.00	0.00	0.00	NO	YES	1.14E-03	1.87E-03
7664393	Hydrogen fluoride	1.14E-03	1.14E-03	1.64E-01	1.64E-01	1.64E-01	7.71E-02	2.02E-02	2.31E-03	0.00	0.00	0.00	0.00	0.00	0.00	YES	#VALUE!	1.55E-08	2.55E-08
190395	Indeno(1,2,3-cd)pyrene	1.55E-08	1.55E-08	4.09E+00	1.00E-01	1.00E-01	1.05E-06	2.75E-07	3.15E-08	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	1.53E-03	2.51E-03
7439921	Lead	1.53E-03	1.53E-03	5.00E-01	1.00E-01	1.00E-01	1.03E-01	2.72E-02	3.10E-03	5.43	5.43	0.00	0.00	0.00	0.00	NO	YES	5.28E-03	8.87E-03
7439978	Mercury	5.28E-03	5.28E-03	5.00E+00	1.00E-01	1.00E-01	8.79E-01	9.37E-02	1.07E-02	93.75	93.75	0.00	0.00	0.00	0.00	YES	YES	1.67E-05	2.74E-05
7439987	Molybdenum	< 1.670E-5	1.67E-05	5.00E+00	1.00E-01	1.00E-01	1.13E-03	2.97E-04	3.39E-05	0.00	0.00	0.00	0.00	0.00	0.00	YES	YES	6.78E-05	1.11E-04
7440020	Nickel	0.0000878	0.0000878	5.24E+02	1.00E-01	1.00E-01	4.59E-03	1.20E-03	1.39E-04	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	3.83E-05	6.29E-05
81203	Naphthalene	3.83E-05	3.83E-05	1.00E+00	8.00E-03	1.00E+00	2.59E-03	6.80E-04	7.77E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	2.29E-06	3.78E-06
85018	Phenanthrene	2.29E-06	2.29E-06	9.80E+00	2.00E-01	2.00E-01	1.59E-04	4.07E-05	4.65E-06	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	1.62E-07	2.66E-07
129000	Pyrene	1.62E-07	1.62E-07	2.00E+00	1.00E-01	1.00E-01	1.10E-05	2.89E-06	3.26E-07	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	4.49E-05	7.37E-05
7782492	Selenium	0.0000449	0.0000449	2.00E+00	1.00E-01	1.00E-01	3.04E-03	7.97E-04	9.11E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	7.30E-06	1.20E-05
7440294	Silver	7.30E-06	7.30E-06	2.00E-01	1.00E-01	1.00E-01	4.94E-04	1.24E-04	1.48E-05	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	8.55E-05	1.40E-04
7440280	Thallium	0.0000855	0.0000855	2.00E-01	1.00E-01	1.00E-01	5.78E-03	1.52E-03	1.73E-04	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	5.79E-05	9.51E-05
7440622	Vanadium	5.79E-05	5.79E-05	5.00E-01	1.00E-01	1.00E-01	3.92E-03	1.03E-03	1.17E-04	0.00	0.00	0.00	0.00	0.00	0.00	YES	YES	4.07E-04	6.68E-04
7440666	Zinc	4.07E-04	4.07E-04	5.00E-02	1.00E-03	1.00E-03	2.75E-02	7.23E-03	8.26E-04	0.00	0.00	0.00	0.00	0.00	0.00	NO	NO	8.50E-02	1.40E-01
PM, titrable		8.50E-02	8.50E-02	5.00E+02	1.00E-03	1.00E-03	1.75E-01	4.68E-02	5.35E-02	0.00	0.00	0.00	0.00	0.00	0.00	NO	NO	3.76E-06	6.18E-06
1746016	Total Dioxins & Furans - TEQ balanced	3.76E-06	3.76E-06	8.20E-04	1.47E-03	1.47E-03	9.52E-06	2.50E-06	2.85E-06	0.00	0.00	0.00	0.00	0.00	0.00	NO	YES	1.41E-09	2.31E-09

Total TAP 6.51E-01 tpy

PDFs of Emission Factors are here:
M:\SharedUsers\intra\intra\Crematory Emissions Updates

PLOT PLAN



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

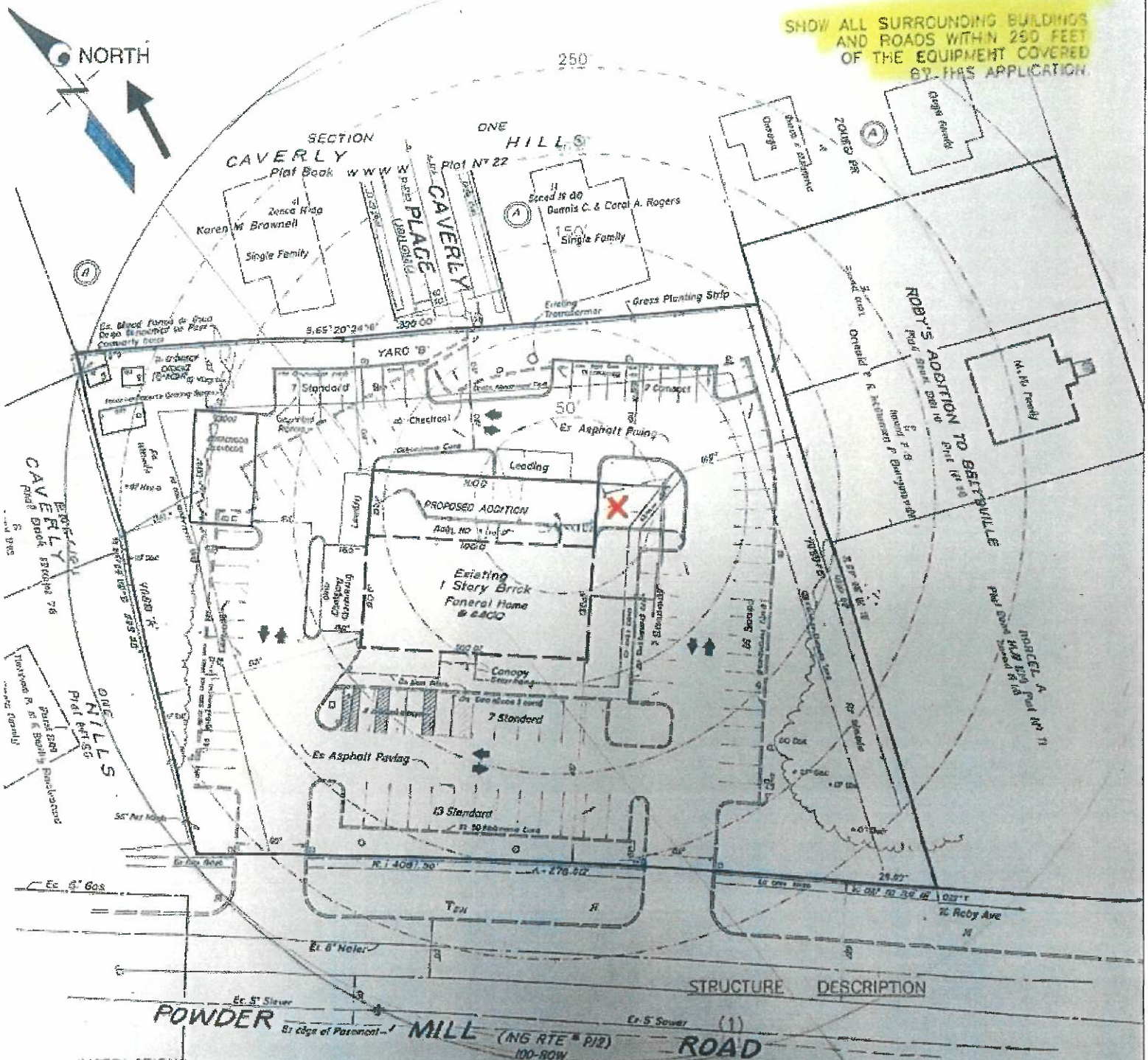
INSTRUCTIONS

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

STRUCTURE DESCRIPTION

- (1) Existing 1 story brick funeral home #4400
- (2) Proposed Crematory Addition
- (3) Detached Garage
- (4) Single Family Home
- (5) Single Family Home
- (6) Single Family Home
- (7) Multi-Family Dwelling
- (8) Existing Asphalt Paving areas
- (9) Existing Wooded area
- (10) 1 Story Shed

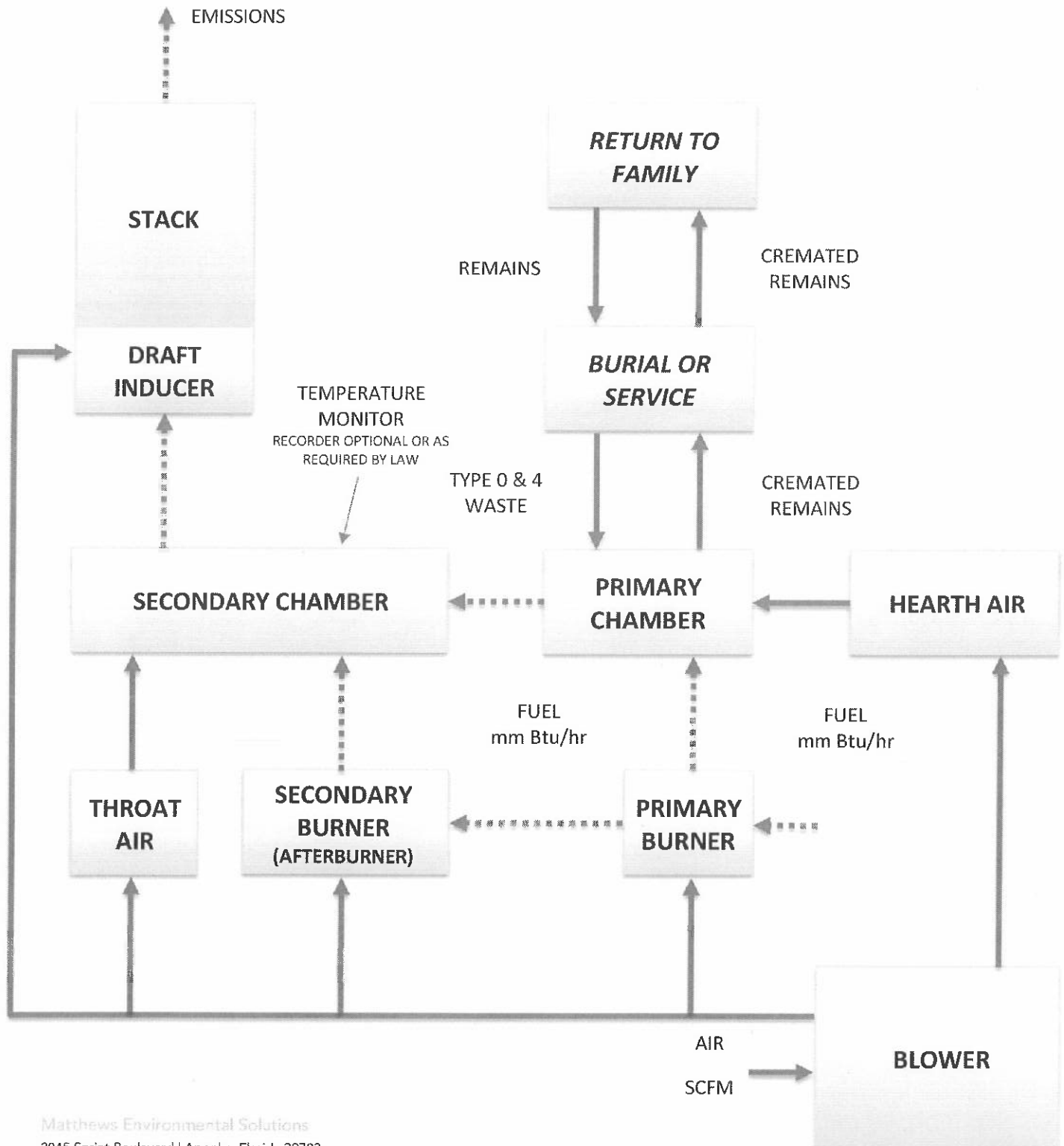
PLOT PLAN



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.

- STRUCTURE DESCRIPTION
- (1) Ex. 5 Sower
- (2) Ex. 5 Sower
- (3) Ex. 5 Sower
- (4) Ex. 5 Sower
- (5) Ex. 5 Sower
- (6) Ex. 5 Sower
- (7) Ex. 5 Sower
- (8) Ex. 5 Sower
- (9) Ex. 5 Sower
- Zoned RA1 (6)
- Use: Single Family Residential



Matthews Environmental Solutions

2045 Sprint Boulevard | Apopka, Florida 32703

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

Matthews
INTERNATIONAL

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Rev 07.27.18

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 m³/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 m³)
 - B. Secondary Chamber 96 cubic feet (2.72 m³)

16. Emission Control Features
 - A. Secondary Chamber with Afterburner Included
 - B. Opacity Monitor and Controller with Visual and Audible Alarms..... Included
 - C. Auxiliary Air Control System..... Included
 - D. Microprocessor Temperature Control System Included

17. Operating Temperatures
 - A. Primary Chamber 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

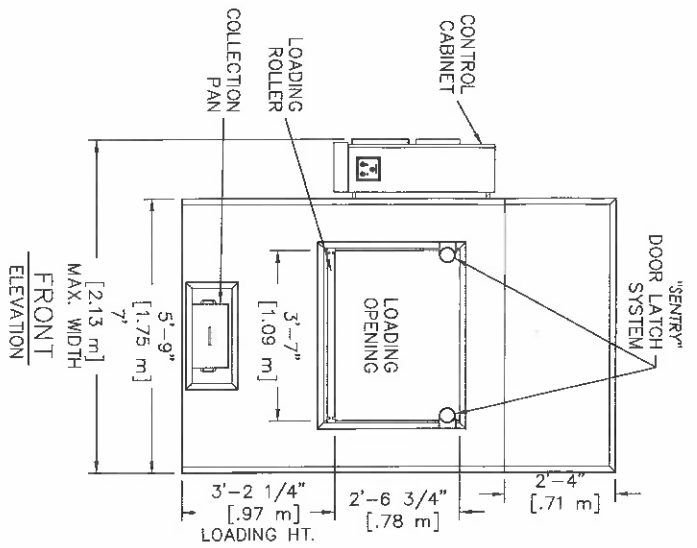
19. Ash Removal Door functions as a heat shield. Sweep out beneath front door into hopper that fills collection pan.

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 |

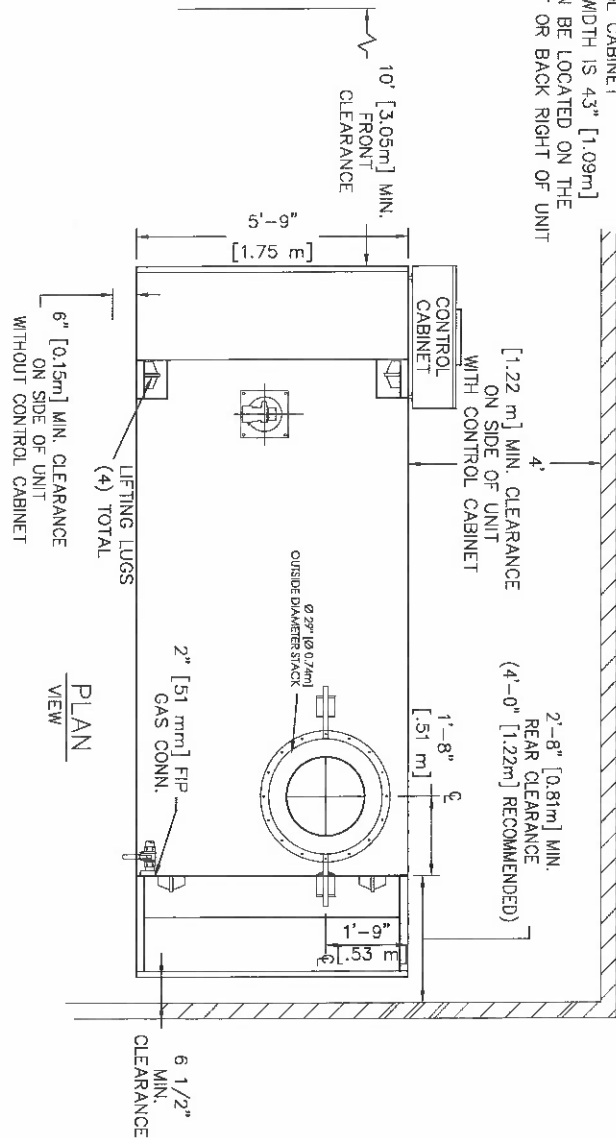
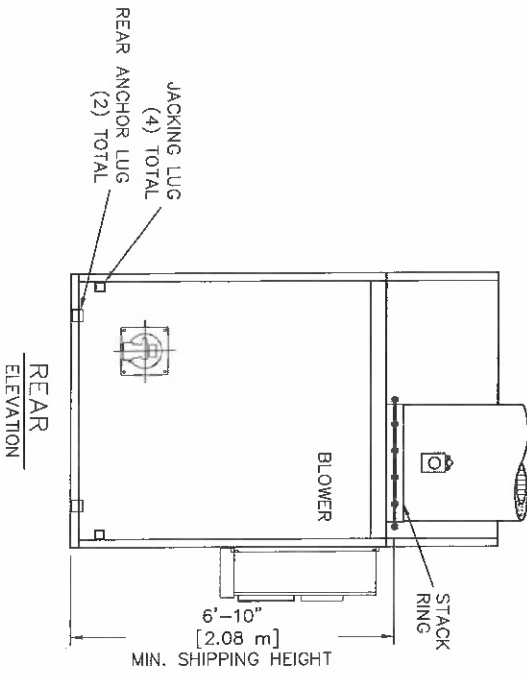
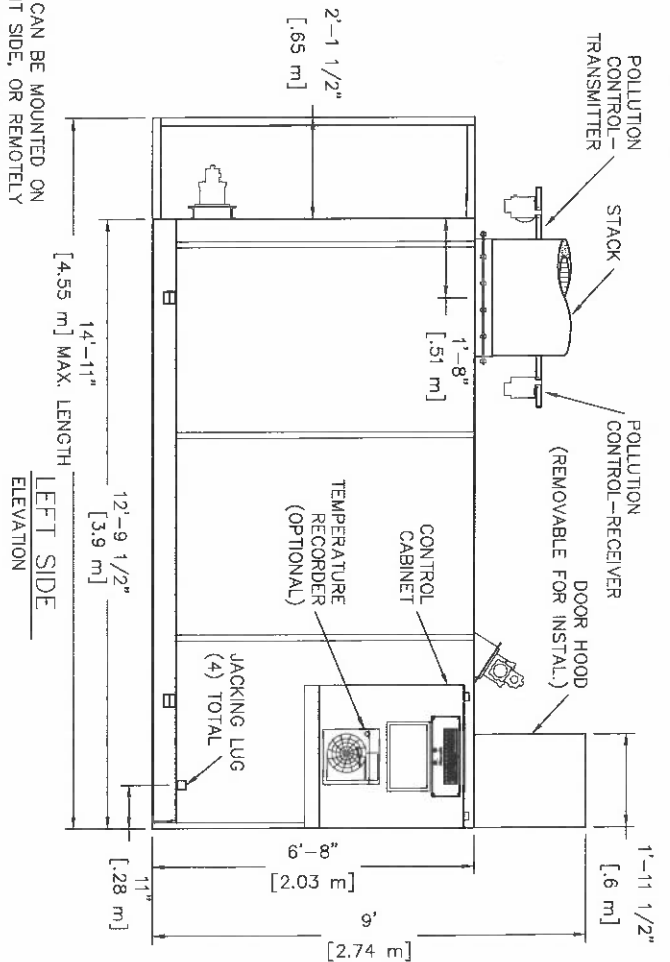
SPECIFICATIONS- Model Power-Pak II Plus

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.



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



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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:					

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CREMATOR CLEARANCES

CREMATOR REQUIREMENTS

STACK INSTALLATION INSTRUCTIONS

RECOMMENDED

MINIMUM

TOP:	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).

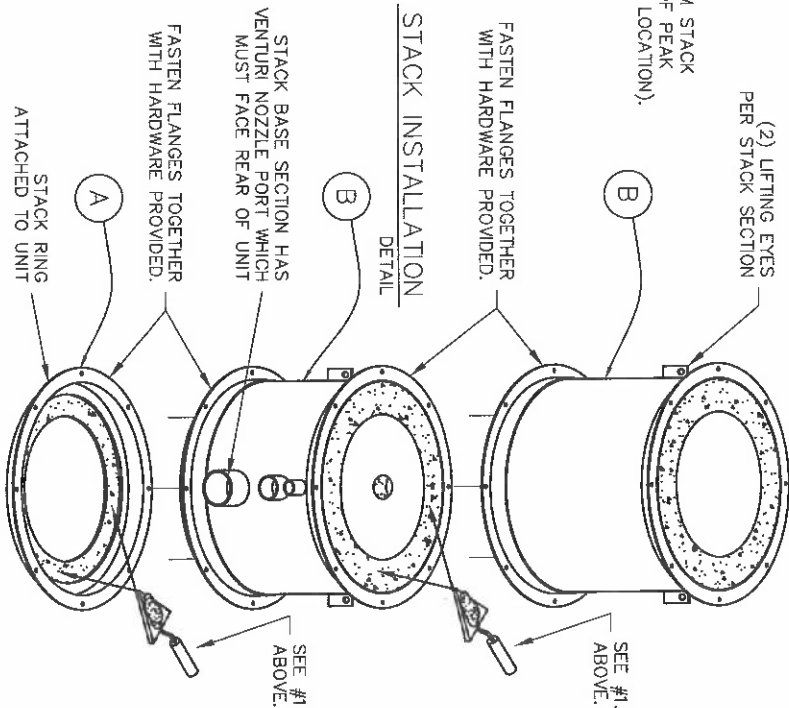
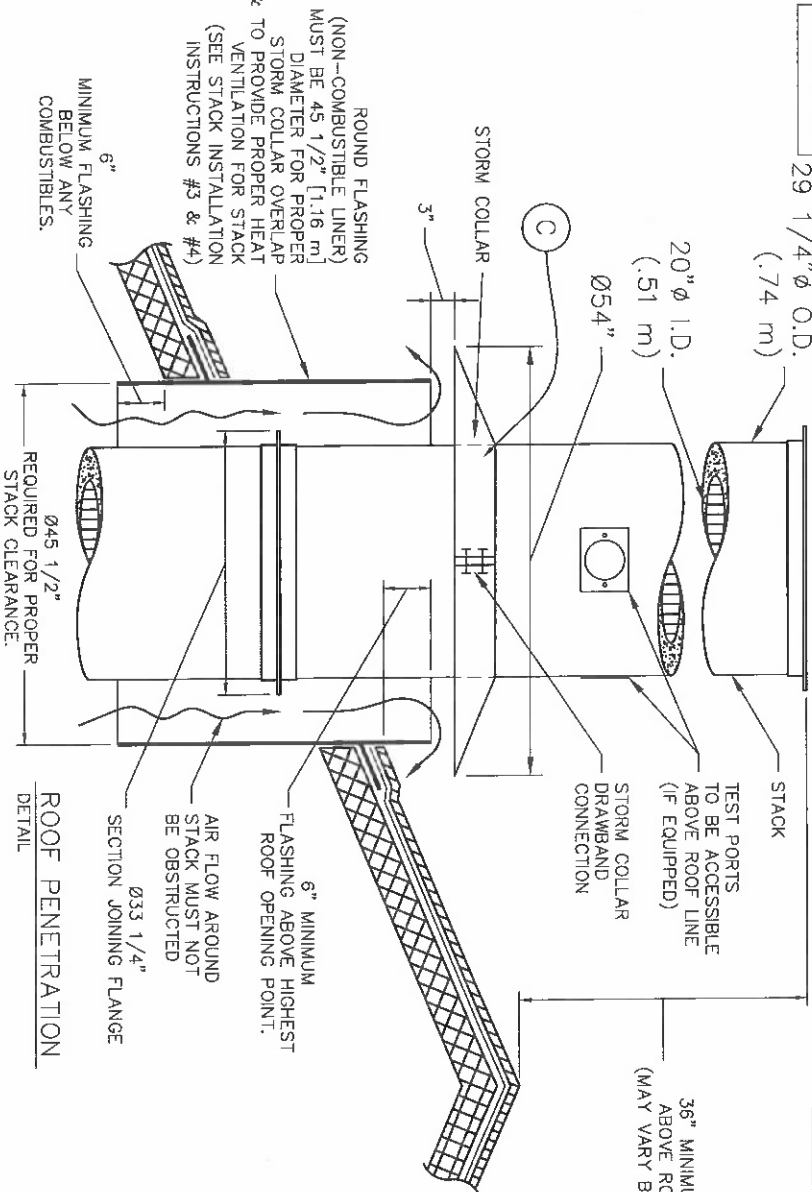
FUEL: A PRESSURE REGULATOR ADJUSTABLE TO 11" [279 mm] W.C. FOR NATURAL GAS AND LP GAS.

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].

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.



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:	09.20.2017	CHANGED MIN. FRONT CLEAR. TO 10'	
SCALE:	1/2" = 1'-0"	SHEET:	OF:		
DWG FILE:					
DWG NUMBER:					

\$(GETVAR ??)

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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

Sulfur Dioxide (SO₂)

$$\begin{array}{rcl} \frac{175 \text{ lb/hr X } 2.17 \text{ lb/ton X } 1 \text{ ton}}{2000 \text{ lbs}} & = & 0.190 \text{ lb/hr} \\ & = & 0.355446 \text{ TPY} \\ \frac{0.189875 \text{ lb/hr X } 4.54\text{E}+05 \text{ mg/lb X } 1 \text{ ppmv}}{1175 \text{ dscfm X } 60 \text{ min/hr X } 0.0283 \text{ m}^3/\text{F}^3 \text{ X } 2.61 \text{ mg/m}^3} & = & 16.55 \text{ ppmv} \end{array}$$

Nitrogen Oxide (NO_x - as Nitrogen Dioxide)

$$\begin{array}{rcl} \frac{175 \text{ lb/hr X } 3.56 \text{ lb/ton X } 1 \text{ ton}}{2000 \text{ lbs}} & = & 0.3115 \text{ lb/hr} \\ & = & 0.583128 \text{ TPY} \\ \frac{0.3115 \text{ lb/hr X } 4.54\text{E}+05 \text{ mg/lb X } 1 \text{ ppmv}}{1175 \text{ dscfm X } 60 \text{ min/hr X } 0.028 \text{ m}^3/\text{F}^3 \text{ X } 1.88 \text{ mg/m}^3} & = & 38.11 \text{ ppmv} \end{array}$$

Particulates (PM & PM₁₀)

$$\begin{array}{rcl} \frac{175 \text{ lb/hr X } 4.67 \text{ lb/ton X } 1 \text{ ton}}{2000 \text{ lbs}} & = & 0.408625 \text{ lb/hr} \\ & = & 0.764946 \text{ TPY} \\ \frac{0.408625 \text{ lb/hr X } 7.00\text{E}+03 \text{ gr/lb X }}{1175 \text{ dscfm X } 60 \text{ min/hr}} & = & 0.04 \text{ gr/dscf} \end{array}$$

Carbon Monoxide (CO)

$$\begin{array}{rcl} \frac{175 \text{ lb/hr X } 2.95 \text{ lb/ton X } 1 \text{ ton}}{2000 \text{ lbs}} & = & 0.258125 \text{ lb/hr} \\ & = & 0.48321 \text{ TPY} \\ \frac{0.258125 \text{ lb/hr X } 4.54\text{E}+05 \text{ mg/lb X } 1 \text{ ppmv}}{1175 \text{ dscfm X } 60 \text{ min/hr X } 0.028 \text{ m}^3/\text{F}^3 \text{ X } 1.14 \text{ mg/m}^3} & = & 52.08 \text{ ppmv} \end{array}$$

Hydrocarbons (TOC/VOC - methane)

$$\begin{array}{rcl} \frac{175 \text{ lb/hr X } 2.99\text{E}-01 \text{ lb/ton X } 1 \text{ ton}}{2000 \text{ lbs}} & = & 0.026163 \text{ lb/hr} \\ & = & 0.048976 \text{ TPY} \\ \frac{0.0261625 \text{ lb/hr X } 4.54\text{E}+05 \text{ mg/lb X } 1 \text{ ppmv}}{1175 \text{ dscfm X } 60 \text{ min/hr X } 0.0283 \text{ m}^3/\text{F}^3 \text{ X } 0.65 \text{ mg/m}^3} & = & 9.16 \text{ ppmv} \end{array}$$

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

$$1000000 \text{ BTU/HR} \times 4.8\text{E-}05 \text{ LBS/BTU} = 48 \text{ LBS/HR}$$

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

$$1200000 \text{ BTU/HR} \times 4.8\text{E-}05 \text{ LBS/BTU} = 58 \text{ LBS/HOUR}$$

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D. COMBUSTION AIR FOR SECONDARY BURNER

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

E. PRODUCTS FROM TYPE 0 WASTE (CONTAINER)

$$7.33 \text{ LBS/LB BURNED} \times 10 \text{ LB/HR BURN RATE} = 73 \text{ LBS/HOUR}$$

F. PRODUCTS FROM TYPE 4 WASTE (TISSUE)

$$1.70 \text{ LBS/LB WASTE} \times 165 \text{ LB/HR BURN RATE} = 281 \text{ LBS/HOUR}$$

G. ADDITIONAL SECONDARY CHAMBER COMBUSTION AIR (THROAT AIR)

$$12000 \text{ CF/HR}^* \times 0.075 \text{ LB/CF AIR} = 900 \text{ LBS/HOUR}$$

H. TOTAL FLUE PRODUCTS

$$= \underline{\underline{3009 \text{ LBS/HOUR}}}$$

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

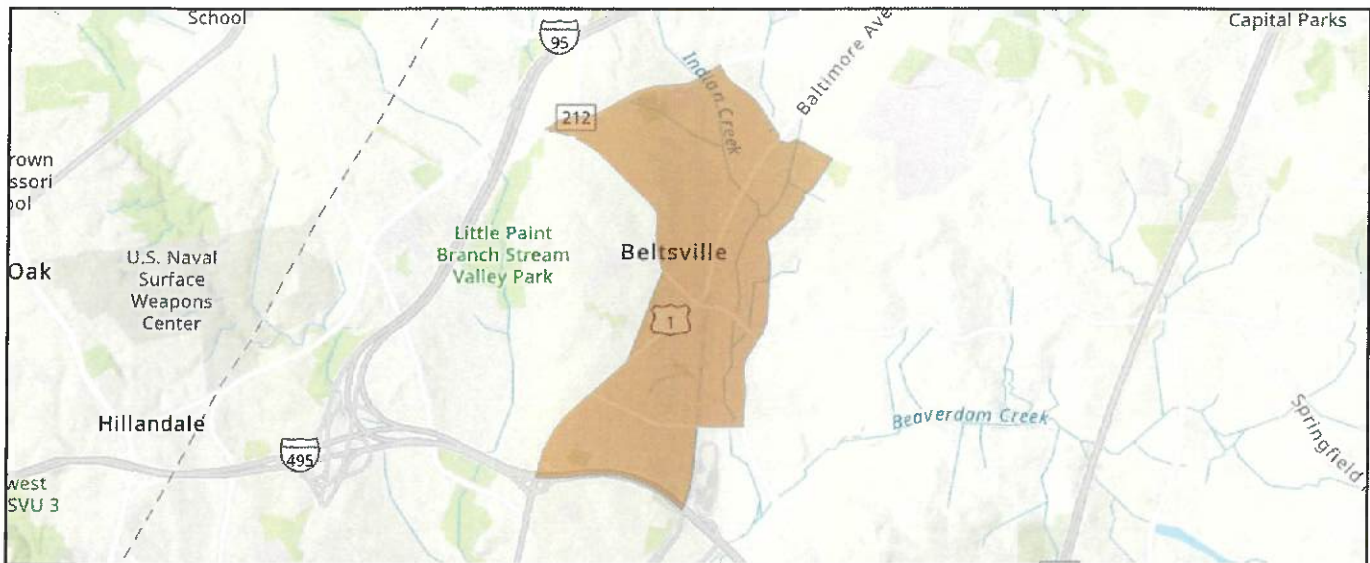
$$\frac{96 \text{ CU. FT}}{2603 \text{ ACFM}} \times \frac{60 \text{ SECONDS}}{1 \text{ MINUTE}} = 2.21 \text{ SECONDS}$$



MDEnviroScreen Report

Census Tract ID: 24033807404

County: Prince George's



MDEnviroScreen Summary

EJ Score: 83.3

Overburdened Community: Yes

Underserved Community: Yes

MDEnviroScreen EJ Score Indicators

Pollution Burden Exposure		Pollution Environmental Effect		Sensitive Population	
Indicator	Percentile	Indicator	Percentile	Indicator	Percentile
PM 2.5	28.8	Lead Paint	51.2	Low Birth Weight	60
Ozone	52.6	RMP Facility	58.8	Asthma Discharge	27.9
Diesel PM	80.1	Superfund	99.3	Myocardial	63.9
Cancer Risk	9.5	Hazardous Waste	69.3	Infarction	
Respiratory Hazard	32.4	Wastewater	42.8	Lack of Broadband	19.1
Traffic	71.2	Brownfield	88.7	Low Income*	62.3
Toxic Release	96.5	Power Plant	76.3	*Low Income is included in Underserved but grouped into Sensitive Population for EJ Score Calculation	
Hazardous		CAFO	0		
Landfill	92.4	Mining	88.5		

*The MDEnviroScreen EJ score represents a combined measure of pollution and the potential vulnerability of a population to the effects of pollution. The EJ score in MDEnviroScreen does not include data from every available map layer. For example, it does not include race/ethnicity or age, however, MDE has made that information available for informational purposes only. Collecting and displaying this data allows users to evaluate the relationships between demographics and pollution burden, and can be used to better understand issues related to environmental justice and racial equity in Maryland. MDE cautions users against using the "Underserved" map layer, or its subcategories, in any manner that would be considered discriminatory under applicable law.



THE PRINCE GEORGE'S COUNTY GOVERNMENT

Office of the Clerk of the Council
301-952-3600

February 13, 2026

RE: SE-4848 Donald V. Borgwardt Funeral Home
Donald V. Borgwardt Funeral Home, P.A., Applicant

*****DECLARATION OF FINALITY OF THE ZONING HEARING EXAMINER'S DECISION*****

The decision of the Zoning Hearing Examiner in this case was filed with the District Council of Prince George's County, Maryland, on January 07, 2026. A copy of the decision was sent to all persons of record on that date. Since no appeal of that decision was filed with the District Council by any person of record or the People's Zoning Counsel, and since the District Council waived its right to make the final decision, the decision of the Zoning Hearing Examiner, Approval with Conditions, became final and effective on February 13, 2026, in accordance with the provisions of Section 27-312 of the Zoning Ordinance of Prince George's County, Maryland.

CERTIFICATE OF SERVICE

This is to certify that on February 13, 2026, this notice was mailed, postage prepaid, to all persons of record.

A handwritten signature in cursive script, reading "Donna J. Brown", is positioned above a horizontal line.

Donna J. Brown
Clerk of the Council

Wayne K. Curry Administration Building
1301 McCormick Drive Largo, MD 20774

OFFICE OF THE ZONING HEARING EXAMINER
FOR PRINCE GEORGE'S COUNTY, MARYLAND

NOTICE OF DECISION

Councilmanic District: 1

SE-4848 Donald V. Borgwardt Funeral Home

Case Number

On the 07th day of January, 2026, the attached Decision of the Zoning Hearing Examiner in Case No. SE-4848 was filed with the District Council.

The Zoning Hearing Examiner's decision shall become final 30 calendar days after the above filing date unless:

- (1) Written appeal within 30 days of the above date is filed* with the District Council by any person of record or by the People's Zoning Counsel; or
- (2) The District Council directs the case be transmitted to the Council for final disposition by the Council.

Zoning Hearing Examiner
County Administration Building
Largo, MD 20774
301-952-3644

*Instructions regarding appeals and oral argument are found on the reverse side of this notice.

Your failure to note an appeal may result in a waiver of your rights to an appeal.

Notice and Decision sent via Mail to Persons of Record:

cc: Russell Shipley, Esq.
Persons of Record (28)
Stan D. Brown, People's Zoning Counsel

NOTEDC1

INSTRUCTIONS FOR FILING

I. Appeal of the Examiner's Decision Shall Be:

- a) In writing;
- b) In a format in which each ground for appeal is numbered in sequence;
- c) Specific as to the error(s) which are claimed to have been committed by the Examiner;

(The page and paragraph numbers of the Examiner's Decision should be identified.)

- d) Specific as to those portions of the record, including the Hearing Examiner's Decision, relied upon to support your allegation of error(s) committed by the Examiner.

(The Exhibit number, transcript page number, and/or the page and paragraph numbers of the Examiner's Decision should be identified.)

II. Requests for Oral Argument:

If you desire oral argument before the District Council, request must be made, in writing, at the time of filing your appeal.

III. Notification to All Persons of Record:

Your appeal and any accompanying request for oral argument must contain a certificate of service to the effect that a copy thereof was sent by you to all persons of record by regular mail.

(A list of these persons and their addresses is included in this notice of Examiner's decision sent to you herewith or is available from the Clerk to the Council.)

IV. When to File:

Your appeal and any request for oral argument must be filed within 30 calendar days after the Examiner's Decision has been filed with the District Council.

V. Where to File:

Clerk of the County Council
County Administration Building
Largo, Maryland 20774
Phone: 301-952-3600

INSTRUCTIONS FOR REPLY TO A REQUEST FOR ORAL ARGUMENT

If you are notified that another person of record has requested oral argument, you may:

- 1) Participate in the hearing if there is oral argument, and/or
- 2) Reply, in writing, to the District Council, opposition. Copies of any written material to be submitted in support of this opposition position shall be filed with the Clerk and all persons of record no later than five (5) business days before the date of oral argument.

**DISTRICT COUNCIL FOR PRINCE GEORGE'S COUNTY, MARYLAND
OFFICE OF THE ZONING HEARING EXAMINER**

**SPECIAL EXCEPTION
4848**

DECISION

Application:	Crematory added to existing Funeral Parlor
Applicant:	Donald V. Borgwardt Funeral Home, P.A.
Opposition:	Deborah Baggett and Steven Smith
Hearing Date:	October 8, 2025
Decision Date:	January 07, 2026
Hearing Examiner:	Maurene Epps McNeil
Disposition:	Approval with Conditions

NATURE OF PROCEEDINGS

- (1) Special Exception 4848 is a request for permission to expand an existing 8,101-square-foot Funeral Home¹, accessory structure and associated parking by adding a 1,664-square-foot crematory on 1.74 acres of RR (Rural Residential) zoned land , identified as 4400 Powder Mill Road, Beltsville, Maryland. All of the Subject Property was included in the prior Special Exceptions approved for the Crematory (SE-3267 and SE-3988).
- (2) Ms. Deborah Baggett and her husband, Steven Smith, appeared in opposition to the request.
- (3) The Technical Staff recommended approval with conditions. (Exhibit 33)
- (4) The record, consisting of 55 Exhibits and one hearing transcript, closed on October 8, 2025.

FINDINGS OF FACT

Subject Property

- (1) The subject property is a 1.74-acre that is in the R-R (now RR) Zone and has been since the inception of zoning in 1949. (Exhibit 38, p. 2) The Funeral Home has been in operation since the early 1980s. Applicant provided a complete recitation of the site's

1 Applicant has opted to have the request reviewed under the regulations for the R-R (Rural Residential) Zone in the prior Edition of the Zoning Ordinance, as permitted by Section 27-1900, et. seq., of the current Edition. The correct term in both the current and prior Editions of the Zoning Ordinance is "Funeral Parlor or Undertaking Establishment". The record also often refers to it as "Funeral Home".

zoning history and prior approvals in its Statement of Justification. (Exhibit 6) Copies of the prior approvals were also included in the record. (Exhibits 28, 29, 33 (Backup), 38, and 39)

(2) The subject property is improved with the 8,101-square-foot Funeral Home and associated parking, fencing, and landscaping. (Exhibit 33, PowerPoint Slides 1 and 7)

Surrounding Area and Neighborhood

(3) The immediate uses surrounding the subject property are as follows:

- North - The terminus of Caverly Place and the side yard of single-family detached dwellings in the RSF-95 (Residential, Single-Family-95) Zone, and formerly in the R-80 (One-Family Detached Residential) Zone
- East - The rear yards of single-family detached dwellings in the RMF-20 (Residential, Multifamily-20) Zone, and formerly in the R-18 (Multifamily Medium Density Residential) Zone
- South - Single-family detached dwellings in the RR, and formerly in the R-R Zone
- West - Single-family detached dwellings in the RSF-95 (Residential, Single-Family-95) Zone, and formerly in the R-80 (One-Family Detached Residential) Zone

(4) The Technical Staff defines the neighborhood as follows:²

- North - Ammendale Road
- East - Lincoln Avenue North and Emack Road
- South - Greenwood Road and Kenny Street
- West - 34th Place and Old Gunpowder Road

Master Plan/General Plan/

² This is the same neighborhood accepted in prior approvals, and the Applicant's witness, accepted as an expert in land use planning, agrees with these boundaries. (Exhibit 44)

(5) The Subject Property lies within Planning Area 61, discussed within the 2010 Approved Subregion 1 Master Plan ("Master Plan") and Sectional Map Amendment ("SMA"). The Master Plan's Land Use Map designated the site for "Low Density" future land use. (Master Plan, p. 160; Exhibit 44, p. 3) The Master Plan included goals to preserve and maintain residential areas, to achieve efficient access to residential, commercial, and employment areas by improvements to roadways, and to minimize dislocation and disruption. (Master Plan pp. 13 and 45)

(6) The 2014 General Plan places the property within the Established Communities category, and its Generalized Future Land Use Map designates it for Residential-Low land use. The Established Communities are the "existing residential neighborhoods and commercial areas served by public water and sewer outside of the Regional Transit Districts and Local Centers." (2014 General Plan, p. 20) The General Plan notes that "Established Communities are most appropriate for context-sensitive infill and low-to medium-density development." (2014 General Plan, p. 20)

Applicant's Proposal

(7) Applicant Donald V. Borgwardt Funeral Home, P.A., is a professional association certified to conduct business within the State of Maryland. (Exhibit 35) Mr. Donald Borgwardt is the President of the Association and has been authorized to speak on its behalf. (Exhibit 50)

(8) The subject property consists of one unsubdivided tax parcel, which is developed with the existing Borgwardt Funeral Home and its associated landscaping, fencing, and off-street parking facilities. The instant request is to add 1,664 square feet to accommodate the addition of a Crematory. There will be no intensification of the existing Funeral Home or alteration of the site beyond the footprint of the Crematory and some minor landscape planting.

(9) Mr. Donald Borgwardt, sole owner of Borgwardt Funeral Home, is licensed by the State of Maryland and Washington, D.C. as a funeral director. He has operated a funeral home on the subject property for approximately 41 years, in accordance with SE-3267 and SE-3988, and the variance and alternative compliance granted by the Board of Appeals and Planning Board/Staff, respectively. Mr. Borgwardt agreed to have the conditions attached to the prior approvals apply to the renewed Special Exception if approved. (T.15) The witness testified that there have been no complaints by the neighbors concerning the existing funeral home over the years. He also noted there have been fewer on-site funerals over time, and he believes this is because the visitation and service are often held on the same day, and because more people are being cremated. (T.17)

(10) Ms. Donna Mabry, Mr. Borgwardt's daughter and a licensed funeral director and mortician, testified that they currently use a third-party provider located in Virginia to

perform cremations, and they've experienced an increase in cremation requests over the years. (T.19-21)

(11) Mr. Borgwardt explained that the funeral home has been able to provide 100-165 cremations annually, using a third-party service located in Virginia. If approved, he does not intend to provide the service to persons from Virginia or D.C. unless one of his funeral directors requires help with cremation duties due to a malfunction with their own cremation equipment. (T.26) Upon cross-examination, Mr. Borgwardt admitted that they would be using the crematory during weekend hours, but Ms. Mabry explained that it would still occur within their business hours, although the business hours of operation were not provided. (T.22-23) Cremations take "anywhere from 45 minutes to a couple of hours" to perform, and Mr. Borgwardt testified this would limit the number done daily and he "does not see where the business is going to climb to [performing cremations] every day." (T. 31)

(12) Mr. Mike Novy, a civil engineer with Atwell, was accepted as an expert in the area of civil engineering. He oversaw the preparation of all the site plans submitted for the review of the Application. (T.34) He provided the following testimony in support of the request:

The site plan is in conformance with the County Code and ... also the landscape plan. We meet all the setbacks, parking requirements, lot coverage,[and] tree canopy coverage So, everything is in conformance with the ... Code....

The existing structure is ...in two parts. [T]he first one was 5,000 square feet, [and] was built prior to 1990. An addition was added of 3,101 square feet. And then we're proposing the addition of 1,664 square feet for this [Crematory]. So since 1990, the square footage is less than 5,000 square feet in addition. So, it is exempt from the subdivision regulations....

(T. 37-38) Upon cross-examination, Mr. Novy admitted that his opinion that the addition and the funeral home satisfy all required provisions of the Zoning Ordinance is limited to the civil engineering outside of the footprint of the building. (T.43)

(13) Mr. Ronald Lipford, accepted as an expert in the area of architecture, explained the changes to the site using the architectural elevations. (Exhibit 5) The front view shows the addition and the crematory chimney. The south elevation has the addition on the right-hand side and the two chimney stacks. (T.46-47) The north elevation shows the profile of the existing funeral home with the addition to the left. The east elevation shows the side of the addition. Again, both elevations match the existing profile and material of the funeral home in terms of height and character, even to the point where the metal gutters and downspouts, as well as the brick color, will match the character of the elevations. (T. 48-49) The witness noted that the height of the chimney stacks may change if required by the Maryland Department of the Environment. (T.50)

(14) Mr. Michael Lenhart, accepted as an expert in transportation planning, testified in support of the Application and prepared a Traffic Memorandum. (Exhibit 31) Mr. Lenhart

explained that he relied upon the Maryland-National Capital Park and Planning Commission's Transportation Guidelines and the Institute for Transportation Engineers ("ITE") Trip Generation Manual in his assessment of the traffic impact that would occur if the 1,664 square foot Crematory is approved. Neither document has a specific trip generation for a Crematory, so he looked at the most similar use, a Funeral Home. This "is [a] common [practice] when you don't have technical materials for backup." (T. 61) He then offered the following justification for his opinion that the use would not have an adverse impact on traffic in the area:

The existing ... funeral home has a floor area of 8,101 square feet on 1.7 acres of land. The proposed crematorium will add an additional 1,664 square feet of developed space to a site with no change to the acreage of the site. The ITE Trip Generation Manual, 11th Edition, does not include a land use that accurately matches the description of a crematorium; however, the crematorium would provide an additional service for [the] existing funeral home. More specifically, a funeral home is a business that provides services for the deceased and their families, including preparation of the body, planning the funeral, and offering support. The preparation and support include burial or cremation services. When a body is processed for burial services, this often includes a procession of vehicles from the funeral home to the cemetery. However, when a body is processed for cremation, there would be no procession of vehicles from the funeral home to the cemetery. Given this, it can be reasonably assumed that the proposed crematory may actually result in a decrease in traffic generated by the site due to the reduction in cemetery services....

[Section 27-357(a)(5) of the Zoning Ordinance] reads that "The use shall not create undue traffic congestion." As discussed above, the proposed crematorium will not have an adverse impact on trips to/from the site and may actually reduce the traffic generated by the funeral home. Therefore, this requirement is met....

(Exhibit 31)

(14) Mr. Lenhart further expounded upon his opinion that the addition of a Crematory would not cause undue traffic congestion in his testimony at the hearing:

[If there was no decrease in the number of funerals] you could assume that there would be a slight increase [in traffic].... [However] there's ... several hours or so for one cremation. You may have a few people come in to identify the body or whatever is needed to get through the services. It would still be a de minimis increase over and above what was occurring if the funeral services were occurring at the same time. And... the use shall not create undue traffic congestion. There ... could be a de minimis increase, but nothing that would cause any traffic concerns....

(T. 64-65)

(15) Mr. Lenhart admitted that he did not know the number of employees at the funeral Home and, therefore, did not consider them in his analysis. (T.65) Upon redirect, Mr. Burghardt noted that the Funeral Home currently employs eight people, and the number is likely to remain unchanged if the request is approved, as they plan to have one of the existing employees licensed to perform cremations, and eventually all will be licensed. (T.

67) He further stated that no more than one cremation at a time may be performed pursuant to State law. (T. 68)

(16) Mr. Barry Burczyk is an equipment consultant for Matthews Environmental Solutions, a part of Matthews International ("Matthews"). He also holds a business degree in marketing and economics. (T.100) The company manufactures cremation equipment. Mr. Burczyk provided testimony relying on Exhibit 46 (the Maryland Department of Environment's ("MDE") final determination on an Air Quality Permit for a Crematory to be operated in conjunction with Evans Funeral Home, one of his clients), Exhibit 47 (the manufacturer's statement on emissions from cremation equipment), and Exhibit 26 (a partial list of Maryland funeral homes that use Matthews' services). (T. 99) One of his responsibilities is to supply information about crematory services to the permitting authorities, in this instance MDE. He has worked with several state permitting authorities and rates Maryland "in the top two or three in terms of what they require, very stringent in our equipment." (T. 102) Part of the State's criteria include third-party testing and emissions reports, and public hearings are held on the permit application. (T.102) Mr. Burczyk further described the State's permitting process as "[taking] at least nine months, [b]ut ..., depending on public hearings and other involved programs, it could be years...." (T. 104)

(17) The following excerpt of the direct questioning by Mr. Shipley and testimony of Mr. Burczyk explains the crematory equipment to be installed if the request is approved:

Q Okay if you're personally aware of this, do you know of your own knowledge whether or not MDE continues to have jurisdiction over the crematory, even though a permit has been issued for it?

A One hundred percent. Annual inspections are required, licensing, and ... preventative maintenance inspections by the manufacturer of the unit, [with] very stringent record-keeping for their needs.

Q Now, you're an employee of Matthews?

A That's correct.

Q Do you know approximately how many crematoriums they have provided throughout the United States?

A Well, we are the leading manufacturer of the units' market right now. We're about seventy percent of the market worldwide in over 5,000 units, with the majority of those in the U.S.

Q Okay. Could you take us through the process of what this unit looks like? How the process is carried out?

A Sure.... I guess the engineering of the unit, there's again – I mentioned two chambers, an upper and lower chamber [What] we refer to sometimes as the case is inserted into the primary chamber. It has a high temperature refractory lining that insulates the unit. That door closes. The cremation starts. The cremation typically is in a corrugated cardboard box, for lack of a better term.

There's a burner that begins the cremation in that chamber, and the cremation proceeds.... [T]he unit has a computerized control that can monitor, regulate, adjust temperatures and air supply. So as that cremation is occurring, the products of combustion go down into the secondary chamber where a secondary burner is destroying those products of combustion, and then again ... holding them for retention

time that is required and then finally for emitting out the flue or stack. The units are UL certified. We've been making them for more than 70 years.

Q What's UL mean?

A Underwriter Laboratory ... and that the unit ... completely... conforms with that requirement.... They're [an] agency that certifies equipment....

Q [A]t the Borgwardt Funeral Home, if this application is granted and they proceed to get a permit to conduct cremations, will there just be one unit used?

A There's a single unit that is being discussed.

Q And as ... Mr. Borgwardt actually uses the process - does Matthews have an ability to monitor?

A Absolutely....[We have a] control system ... called MPYRE. That is monitored 24/7, 365, [and] the operator at any time can instantly push a button if he wants to connect with a support team. If any type of trigger or alarm would go on, we would be alerted to that, and our technicians would be in contact with the operator on that within minutes.

Q So if something went wrong, could you, from Florida, shut the unit down?

A We could, and we could make adjustments also.

Q Okay. And could the operator at the funeral home - the licensed operator ... - could they also shut it down?

A Absolutely. They have full autonomy for operation of that unit....[I would say there is rarely a shut down for malfunction.] There's - in the combustion process of heat and air - flame and air- the air can be adjusted to accommodate differences in bodies. Obese cases have a lot of natural fuel. So there's adjustments that can be made depending on the type of individual being cremated.... I would say [it's] extremely rare [for one of these units to be shut down.]

(T. 106- 110)

(18) Mr. Burczyk explained that he was involved with the Evans Funeral Home application and hearing for a State permit to construct and operate a Crematorium, and that a similar process would be required if the instant request is approved. (Exhibit 46, T. 111-112) He also noted that Matthews would offer training to the Applicant, or there could be training provided by the Cremation Association of North America, and Matthews' technicians would be available for in-person training. (T. 112-113) He stated that Matthews has entered into a contract with the Applicant to provide its services. (T. 113) Upon cross-examination by Mr. Smith, it was stressed that over two hours of the hearing before MDE on the Evans Funeral Home request for approval of a crematory centered on mercury emission rates and the need to limit Evans to no more than two cremations in an 8-hour period. (Exhibit 46; T. 115-116) Upon cross-examination by Mr. Brown, it was revealed that Applicant has requested equipment that could handle approximately 700-750 cremations annually. (T. 120)

(19) Mr. Mark Ferguson, accepted as an expert in the area of land use planning, testified in support of the request and prepared a Land Planning Analysis. (Exhibit 44) The Analysis comprehensively addressed the application's compliance with the criteria for approval found in Sections 27-317, 27-341, and 27-357 of the Prince George's County Code. The Analysis first described the application's compliance with Sections 27-317 (a)(1) and (2):

There are no regulated environmental features on or adjacent to the subject property.

The subject property is located on the north side of Powder Mill Road, a collector roadway. The existing funeral home has access from Powder Mill Road via two entrance points. There are recently constructed stormwater management facilities in the right-of-way of Powder Mill Road in the front of the subject property....

A historic site, the Orme-Shaw House (County Site #61-002), is 900 feet south of the subject property, beyond the limits of the defined neighborhood, and its site and the subject property are not intervisible....

Section 27-317(a)[(1)] ... provides that a Special Exception may be approved if ... the proposed use and site plan are in harmony with the purposes of [the Zoning Ordinance].... The ... subject property [is in harmony with the fifteen purposes of the prior zoning ordinance]....

In allowing for the expansion of the existing, active land use of the funeral home to include the ability to provide cremation services, approval of the subject application will promote the health, safety, morals, comfort, convenience and welfare of the inhabitants of the County by providing for a safe, sanitary and less costly alternative to interment of the deceased....

[The subject property implements the applicable plans....] [T]he General Plan classified the subject site ... in the Established Communities category... and recommends that 'Established communities are most appropriate for context-sensitive infill and low-to medium-density development....' [T]he approval of the subject application would be context-sensitive infill development by virtue of (1) the compatible architectural design of the proposed addition; and (2) by virtue of the long existence of this use on the subject property....

The Master Plan ... 'Future Land Use' map recommends the subject property and the entirety of the defined neighborhood for 'Residential Low' land use.... The proposed expansion will implement [applicable]... strategies by proposing a very modest addition to the existing building, replicating the scale and character of the existing building, which is itself of comparable scale..., [and it does] maintain ... [collector roadway C-112] as required by current and future development....

The special exception area does not contain any area of Regulated Areas of the County's Green Infrastructure Network, and as such will not impair the Green Infrastructure Plan, and its compliance with the Tree Canopy Coverage Ordinance will further ... Policy 7, to 'preserve, enhance, connect, and restore forest and tree canopy coverage'....

[T]he property containing the Orme-Shaw House (County Historic Site #61-002) is located approximately nine hundred feet south of the subject property. That site and the subject property are not intervisible; thus, the approval of the instant application will be in harmony with the purpose of the prior zoning ordinance to implement [the Historic Sites and Districts Plan]....

The 2009 Countywide Master Plan of Transportation as amended by the 2010 Subregion 1 Master Plan classifies Powder Mill Road as a collector roadway (C-112) with two lanes

in an 80'-100' right-of-way, though it notes that in the area of the subject property, the required right-of-way may be reduced to as little as sixty feet. This configuration is shown on the Special Exception Site Plan. The Master Plan of Transportation also proposes a bike lane on Powder Mill Road.

(Exhibit 44, pp. 4-7)

(20) The Analysis next addressed compliance with the remaining applicable purposes found in Section 27-317 (a) (3)-(15) and Section 27-428(a)(1), summarized as follows:

- Due to the de minimis changes to the site, approval of the request will not impair the purpose of promoting the conservation of the community, which will be developed with adequate public facilities.
- The addition of the small Crematory fulfills the need of an existing successful County business, thereby promoting the orderly development of the County.
- The Crematory would be constructed in accordance with the various regulations of the Zoning Ordinance to ensure the provisions of adequate light, air, and privacy.
- For similar reasons, the request would promote the most beneficial relationship between the uses of land and buildings and protect the neighbors from any adverse impact.
- The Crematory will be constructed in accordance with all County laws enacted to protect the County from flood, fire, panic, and other dangers (such as the floodplain and stormwater management regulations, the fire prevention and building codes, and the table of uses in the Zoning Ordinance).
- The request will provide employment opportunities to construct the Crematory, and employees to operate it, thereby providing employment and contributing to the tax base.
- The request will be constructed in accordance with all regulations that will prevent the overcrowding of land.
- The Special Exception will continue to operate with sufficient off-street parking, and the Crematory is located in an area on site that should minimize new traffic on the adjacent roadways and may reduce traffic since cremation should reduce the need for long vehicular processions from the site to a cemetery.
- Since the use will satisfy all applicable requirements of the Zoning Ordinance, and the Zoning Ordinance is a tool for the implementation of the planning goal to ensure the social and economic stability of the County, the request is in harmony with this goal.
- The use meets the purpose that it protect against undue noise, air and water pollution, and preserve, stream valleys, steep slopes, dense forests, scenic vistas, and other similar features, due to its location on a developed site without regulated environmental features, its exemption from the requirement to submit a Type 2

Tree Conservation Plan, no impact on steep slopes or scenic vistas, utilization of modern crematory equipment, and the requirement that it receive an air quality permit from the Maryland Department of the Environment.

- The purposes of the R-R Zone are met since the crematory will not affect the existing woodlands, the application is exempt from the requirement to file a tree conservation plan, and there will be de minimis land disturbance and, therefore, little possibility of soil erosion or stream valley flooding.

(Exhibit 44, pp. 4-11)

(21) Mr. Ferguson found that the remaining provisions of Section 27-317 of the Zoning Ordinance were met since: if the prior approvals and conditions remain in effect the proposed expanded use would remain in conformance with all of the applicable requirements of the prior Edition of the Zoning Ordinance (Section 27-317 (a)(2)); the use will not substantially impair the integrity of the Master Plan or applicable Functional Master Plan, as noted above (Section 27-317(a)(3)); the expanded use of the property will not adversely affect the health, safety, or welfare of residents or workers in the area because it will be developed in a manner that satisfies all applicable laws, and the existing Funeral Home would be more impactful due to its larger lot coverage and the increased traffic when in use but the District Council has already determined that use does not adversely impact the residents or workers in its prior approvals for the Funeral Home on site (Section 27-317 (a)(4)); the surrounding neighborhood is already developed, the proposed use is one already determined to not be detrimental to the use/development of adjacent properties and/or the neighborhood given its inclusion in the Table of Uses, and since the Funeral Home has already been found to meet this purpose so the less impactful Crematory should also have negligible impact on these properties (Section 27-317(a)(5)); the site is exempt from the requirement to provide a Tree Conservation Plan (Section 27-317(a)(6)); there are no regulated environmental features on the site (Section 27-317(a)(7)); and, the property does not lie within a Chesapeake Bay Critical Area Overlay Zone (Section 27-317(b)). (Exhibit 44, pp. 11-13)

(22) Mr. Ferguson also found compliance with the provisions in Sections 27-341 and 27-357. Section 27-341 requires that the Crematory not be located within any proposed street or other public right-of-way and the instant Crematory meets this requirement. Section 27-357 applies solely to the Funeral Home. It first requires 50-foot side and rear yard setbacks from all adjoining land in any residential zone or land proposed for residential purposes, as outlined in certain approved plans. The Funeral Home is set back more than fifty feet from all abutting land. (Section 27-357(a)(1)) The Funeral Home is required to be located on at least one and one-half contiguous acres, and the subject property contains approximately 1.74 acres. (Section 27-357 (a)(2)) There is nothing in the record to alter the original finding that the Funeral Home does not depreciate the value of neighboring properties, nor that it adversely affects the character of neighboring properties, and since the use has not changed, the prior findings should continue. (Sections 27-357(a)(3) and (4)). Finally, the Funeral Home was previously found to not create undue traffic congestion and "[s]ince the scope of the funeral home portion of the uses will not be expanded, and ... because the addition of a crematory

could potentially reduce existing traffic for the funeral home ... by removing the need for some of the long vehicular processions from the funeral home to the cemetery" the prior findings should stand. (Section 27-357(a)(5); Exhibit 44, pp. 13-14)

(23) Mr. Ferguson provided the following testimony to support his opinion that the request satisfies all of these provisions of the Zoning Ordinance:

I ... note that the prior special exception approvals ... did include grants of alternative compliance. One was associated with the [buffer for the]garage. The other was ... a departure from design standards, which was associated with ... the loading space.... [My] presumption is that those prior approvals would continue in force, as the substance of the funeral home use is not being changed.... The only physical alteration is for the crematory addition....

I did evaluate the General Plan – this is in the Established Communities – which recommends context-sensitive infill. And because of the harmoniousness of Mr. Lipford's design in its modest scale, I do find ... it would be context-sensitive infill ... particularly given the long-established character of the existing funeral home use. The master plan's recommendations are for low-density residential use....

And ... the additional requirements of 27-357, which speak to not affecting the character of the neighborhood, really speak to that intent of the ... master plan as well. and those findings ... have been made in ... both of the prior special exception cases for the funeral home use already....

It is ... first important to note that the table of uses does provide for the crematory use, ... [and] there are impacts that are necessarily and habitually associated with crematories.... And so ... the question of adverse effect ... for me, is related to, is this crematory disproportionate to other crematories? In my opinion, that is ... not the case, and I do base that partly on information ... published by the manufacturer [and]... included as Exhibit 47 ... which indicates that the ... scope of emissions on a time-constant basis is less than ... a wood stove....

My opinion was based on the fact that the emissions from modern crematories are modest in scope, certainly compared to other items which are regulated by MDE under the same provisions. So the ... air quality provisions in COMAR, for which you find crematories, are the same as those provided for incinerators – municipal waste incinerators. And this certainly is ... of a much, much, much smaller scale than those.

And I also condition my finding on the successful grant of an air quality permit from the Department of the Environment so that they, in fact, do the full review of the level of emissions from the crematory and can, in fact, make that finding of minimal adverse impact on the health, safety, and welfare of the neighborhood....

And so really the question is, would the ... proposed crematory adversely affect the use of adjacent properties? And again, I think the question has to be in a disproportionate way to ... crematories generically in the RR zone. And again, my opinion is no....

So based on all of those provisions of 27-317 and my opinions thereon, I conclude that this project would meet all of the requirements for approval of 37-317, the additional

requirements in 27-357 and 341 and would meet the Schultz test of not having a greater adverse impact here than it would at another site in the RR zone.

(T. 76- 81)

Opposition's concerns

(24) Mr. Stephen Smith and Ms. Baggett appeared in opposition to the request. They live on Caverly Avenue just beyond the three adjacent homes shown on the Special Exception Site Plan. (Exhibit 45; T. 92) Mr. Smith offered the following testimony in opposition to the Crematory:

[W]e have lived in this house since 1983.... When the funeral home was proposed, we were living in this house, and we did not object to the funeral home being located where it is.

And I would say that our concern about the crematory has nothing whatsoever to do with concerns about Mr. Borgwardt or his operation of the funeral home at all.... [W]e have nothing but good things to say about the operation of that establishment.... I think the uses as a crematory is vastly different, both in perception and reality, from the use ... as a funeral home....

In fact, when you look at the record, I know that there's discussion of the Evans Funeral Home and ... the proposed addition of the crematory there ... that was approved.... But there's a long report there by MDE, Maryland Department of the Environment, about what particulates are in fact emitted from a crematory are in fact emitted from a crematory. And that ... was a Matthews crematory at issue in that case as well, and one of the reasons I asked about what we're getting into the height of the stacks, I believe in that case ... MDE required the stacks to be elevated to 38 feet, and that was because the extra height of the stacks apparently gives more opportunity for the emissions to be burned up.

And ... it's a good thing they have a better opportunity to get burned up and not be emitted into the atmosphere, but at the same time, it makes me even more suspect of what is getting burned up and ... ultimately what's going into the atmosphere.

I'm concerned about the potential impact on the value of residential homes in the neighborhood.... [I]f I was coming into a neighborhood to buy a home and was aware that there's a crematory next door, I very most likely would not pursue that purchase, and that's because of my perception. I don't have to go do a bunch of research. I think that's a perception that a lot of folks have, and ... I think that's a very common perception. It's something that I think should be taken into account when considering whether or not the issue should be permitted.

The... last point I want to make is simply that I asked about the other crematorium that exists in Beltsville. It's located in Beltsville Industrial Park. In my opinion, that's where a crematory should be located, in an industrial park, because any odors and any

emissions coming through most likely will not have an opportunity to harm children ... [and] families....[I]n my opinion, there's a reason that [a] crematory is allowed in the industrial park. And I know I can't by fiat simply say that's where they all should be. But it certainly is my opinion about where they should be, because I think they pose a danger. And given the existence of that one crematory ... that already exists in Beltsville, I look at it as a weighing factor.

If there's one already there, we has no evidence to suggest that the one that is there is not sufficient, both in terms of quality and in terms of volume, to take care of whatever need there may be. And if that's the case, then I look at the potential harm on one side and the lack of need on the other. And when I see that balancing act, then the potential harm outweighs the whole need issue, because there's no evidence that there is a need.... [I]f there's no need and there is potential harm, then we should not approve the use.... [I understand that the ordinance does not require an analysis of need.] I raised it ... because it seemed to me a logical factor when considering the health, safety, and welfare of the general neighborhood and employees and residents of the neighborhood.... [I] there's no need to bring that potential noxious use into the neighborhood, and there is a potential danger in doing so, then to me, that says that the health, safety and welfare of the employees and residents in the neighborhood is not going to be well served by the existence of this use....

(T. 92-98)

Agency Comments

(25) In reviewing air-quality permit request to operate a crematory at Evans Funeral Home in Harford County, Maryland,³ the Maryland Department of the Environment ("MDE") addressed the community's concerns about elements emitted from the cremains, and the impact on air quality:

A permit to construct is required before construction or modification of a crematory. COMAR 26.11.02.02. When evaluating whether to issue a Permit to Construct, the Department uses available data to determine whether a proposed source will violate state and federal air pollutant standards. Proposed projects are evaluated based on their maximum capacity to emit air pollutants under its physical and operational design, also known as their "potential to emit."

The Department uses emissions factors to estimate emissions from air pollution sources. Emissions factors are established using data developed from the average or the worst-case emission levels measured at an operating facility. The use of emissions factors is a widely accepted practice to establish a reference point for the expected quantity of

³ This Funeral Home uses Matthews Cremation Equipment. (Exhibit 33, Backup pp. 39-43)

emissions from a proposed source of air pollution and to use those estimates to determine whether the source will comply with applicable air quality standards.

In 1999, EPA conducted extensive stack emissions testing of a crematory unit for the purpose of developing emissions factors for human crematories. Since then, these emissions factors have been used throughout the United States as the basis for estimating emissions from human crematories.

To ensure that the EPA crematory emission factors were still the most conservative estimates, upon request of several member states including Maryland, the Mid-Atlantic Regional Air Management Association (MARAMA), an association of state and local air agencies, formed a crematory workgroup in October 2023 to assist member agencies. MARAMA member agencies include Maryland, Delaware, the District of Columbia, New Jersey, North Carolina, Pennsylvania, Virginia, West Virginia, and Philadelphia and Allegheny County, Pennsylvania. The workgroup meets monthly and is in the process of developing a best practices document for the permitting and enforcement of human and animal crematories based on the input received from member agencies and other states, such as California and Massachusetts, who also participate in the workgroup.

The Department's strategy for estimating emissions from the proposed human crematory was to use the worst-case known data currently available for all pollutants, as this represents the maximum amount of a given pollutant that we would expect to be emitted.

After reviewing data from the workgroup, the Department has determined that the EPA emissions factors are still the most conservative estimates (higher emission factors expected to be more protective of public health) when compared to actual stack emissions test data conducted in recent years in other states for emissions of sulfur dioxide, volatile organic compounds, and carbon monoxide.

However, for emissions of particulate matter, the Department reviewed recent reported data in the EPA's 2020 National Emissions Inventory Technical Support Document for Cremation to establish a more conservative emissions factor than what was previously used based on the 1999 EPA emissions factors. This document was also used to establish more conservative emissions factors for the following toxic air pollutants: acenaphthylene, arsenic, benzo (g,h,i) perylene, cadmium, chromium (VI), cobalt, hydrogen chloride, and naphthalene.

For emissions of acetaldehyde, formaldehyde, and mercury, the Department found that the worst-case data from California's Bay Area Air Quality Management District's permit manual for cremation was more conservative than the 1999 EPA emissions factors and have therefore adopted these. Due to mercury's high level of toxicity, mercury has the most potential for impact to public health, and therefore the most stringent toxicity exposure level, of all the pollutants emitted from a human crematory. The California Bay Area emissions factor to estimate mercury emissions is 0.005 pounds per cremation, which is higher than what Maryland previously used based on EPA's emissions factor (0.003 pounds per cremation). Using the higher emissions factor results in a higher projected mercury emissions rate. For review purposes, using the higher emissions factor provides a more conservative picture of emissions, which is more protective of public health.

This emissions rate coupled with the stringent exposure level for mercury required by Maryland's toxic air pollutant regulations, limits Evans Funeral Chapel and Cremation Services – White Marsh, P.A. to no more than two cremations in an 8-hour period.

Since mercury has the most stringent exposure level, using mercury emissions to limit the operation of the crematory significantly reduces emissions of all other toxic air pollutants well below their established exposure levels....

A well-operated and maintained human crematory should not result in a violation of any applicable air quality standard. There are several measures in place in the permit to ensure that the crematory is properly operated and maintained to achieve complete combustion and is equipped with appropriate emissions control and monitoring systems.... [T]he permit requires Evans Funeral Chapel and Cremation Services – White Marsh, P.A. to develop and maintain an Operations and Maintenance Plan that is approved by the Department.

First, the permit requires that the crematory 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 °F as recommended by the manufacturer. At a temperature of at least 1600 °F, gases from the primary cremation chamber achieve complete combustion, thereby reducing the potential for pollutants to be discharged to the atmosphere. Therefore, even though it is not labeled as such in the permit application, a secondary combustion chamber is an emissions control device. The permit not only requires a minimum temperature of at least 1600 °F, the permit requires that the temperature be continuously monitored and recorded, and a cremation cannot be initiated unless the secondary chamber temperature reaches that temperature. As a condition of the Permit to Construct, the Department will receive and review the temperature data to ensure that the secondary combustion chamber is operating as required.

Second, the permit requires that the crematory be equipped with an opacity sensor that is interlocked with a control system that continuously monitors the stack gases for visible emissions and adjusts cremation operations to prevent visible emissions from exiting the crematory stack. Although the control system is designed to make adjustments automatically to prevent visible emissions, such as adjusting the air flow or gas mixture to promote complete combustion, the crematory vendor can also make adjustments remotely or instruct the facility operator locally to make adjustments as needed.

Third, the permit requires the stack height of the crematory stack to be at least 37 feet above ground. At this height, based on the Department's evaluation of the impact of toxic air pollutants from the crematory, the exhaust gases from the stack will be properly dispersed to prevent downwash or heavy concentrations of pollutants at or near the facility and neighboring area.

Fourth, the permit requires initial opacity testing and actual or representative stack emissions testing for particulate matter and metal emissions. The use of stack emissions testing results from similar or identical units or processes is a widely accepted practice used by industry and federal and state environmental agencies to establish a frame of reference for the quantity, nature, and range of emissions from a certain source category, such as from human cremation.

Fifth, the permit restricts what can be processed in the human crematory, limiting cremations to only two in any 8-hour period.

Finally, the permit requires Evans Funeral Chapel and Cremation Services-White Marsh, P.A. to develop and maintain an Operations and Maintenance Plan that is approved by the Department. The plan would include provisions for the operator to ensure that the crematory is properly operated and maintained and if there are process upsets, what corrective actions would be required.

These measures are sufficiently stringent to ensure complete combustion and proper operation and maintenance. Additional emissions controls or monitors such as scrubbers or carbon monoxide monitors are not necessary to demonstrate compliance with applicable air quality standards....

The Department has evaluated the air quality impacts associated with the equipment presented in the application for a permit for the construction of an air pollution source at the location selected by the applicant. The Department has no authority to require an applicant to locate their project at an alternative location. MDE can only conduct a review of the pollutants emitted from the chosen facility at the chosen location and make a determination on whether they meet air quality standards, do not adversely impact public health, and will not create a nuisance. If the determination is that there are no negative findings regarding these three areas of consideration, using the evaluation tools and methodologies available to the Department (see more below), a decision will be made to issue a permit....

As part of its evaluation of the application, the Department reviews technical information contained in both the application and the Department's files and in published reference materials. A determination is then made as to whether the estimated emissions from the equipment under review will or will not cause or create:

1. A violation of any of the National Ambient Air Quality Standards (for federal criteria pollutants) or regulatory requirements associated with those standards.
2. An adverse effect on public health (for toxic air pollutants).
3. A nuisance.

Cumulative impacts for criteria pollutants are taken into account indirectly in that the emissions from all existing sources are reflected in the pollutant concentrations measured by ambient air quality monitors located around the State. From a permit review standpoint, the monitored value for a criteria pollutant is considered to be a background level (more detail regarding this is provided in the next paragraph). If an existing source or a collection of existing sources has an adverse impact on air quality, it would be reflected in the monitoring data. Cumulative impacts associated with toxic air pollutants are indirectly considered in the setting of the standard: the regulatory standards established for toxic air pollutants were set conservatively (1/100th of the worker safety level) to, among other things, account for the presence of multiple sources.

For criteria pollutants, the Department reviews modeling information (or conducts its own modeling exercise) and determines the maximum ambient pollutant concentration the equipment is expected to generate. This maximum concentration is then added to the background (monitored) concentration to determine an overall estimated impact. If the overall impact is estimated to be below the federal ambient air quality standard, the determination is that the equipment will not adversely impact air quality.

For toxic air pollutants, the Department reviews modeling information to determine whether the maximum ground-level concentration is below conservative (more protective of public health) standards established by the Department. If the modeling determines that the maximum concentration is below the standards, the Department's conclusion is that the equipment will not harm public health.

For Evans Funeral Chapel and Cremation Services - White Marsh, P.A., the conclusion reached by the Department is that the emissions from the proposed human crematory would not cause a violation of any ambient air quality standard and the maximum concentration of any toxic air pollutant would be below any threshold that the Department considers injurious to public health.

As required by Maryland law, the applicant provided an Environmental Justice (EJ) Score Report with their permit application submitted in February 2023. The EJ Score in the census tract where the facility will be located, expressed as a statewide percentile, was shown to be 41, which the Department verified. 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....

The Department's review process considers broad health impacts rather than health impacts based on specific health conditions. That is the situation for every permit application reviewed, from crematories to large industrial facilities to power plants. Part of our permit review process considers whether a facility will meet federal ambient air quality standards.

The EPA develops National Ambient Air Quality Standards (NAAQS) for six criteria pollutants to set standards that protect public health with an adequate margin for safety. These standards are developed by health experts, to ensure that the standards are sufficient to protect public health.

For federal non-criteria pollutants (188 hazardous air pollutants at the federal level) the EPA establishes technology standards that apply to various operations. These standards result in the installation of pollution control technologies that minimize the amount of pollution allowed. Although there are no federal technology standards for crematories, technology controls are addressed within the Maryland permitting arena and health impacts are addressed indirectly_

Maryland identifies thousands of toxic air pollutants. To regulate toxic air emissions, Maryland requires sources to comply with Toxic-based Best Available Control Technology (TBACT). For crematories, TBACT requires that crematories be equipped with a secondary chamber capable of achieving a minimum residence time and combustion zone temperature. Following the use of TBACT, a crematory must ensure that the after-control level of emissions of any toxic air pollutant will not endanger public health. This is done by comparing the modeled concentration of a particular toxic air

pollutant at the worst-case ground level point beyond the property line to a concentration set by the American Conference of Governmental Industrial Hygienists for that same pollutant. That organization sets their concentration at a level to protect workers in an industrial setting to which those workers are exposed to the pollutant in question daily over an eight-hour period. Under the Maryland permitting system, the Department takes that concentration and divides it by a factor of 100 so that it is more protective of public health. For all crematory toxic air pollutants, including mercury, the expected emissions from the proposed crematory will not exceed the short-term exposure limits established for each pollutant that are protective of public health.

For certain known carcinogenic pollutants, an additional annual concentration standard is set by the EPA based on cancer risk. The concentration standard is set at a level where if 100,000 people were exposed to the estimated concentration of that pollutant in the atmosphere for 70 consecutive years, one person would be expected to develop cancer. For all crematory-related toxic air pollutants, the expected emissions from the proposed crematory will not exceed the annual exposure limits established for each pollutant that are protective of public health

With regard to metals recycling of implants or other metal devices, non-battery operated medical implants or devices that are not explicitly required to be removed by MOH regulation may be in the human remains that are processed by the human crematory. During the cremation process, water, soft tissues, and the cremation container are burned. In addition to bone fragments, any metal implants and devices capable of withstanding the heat remain intact in the primary chamber and are not emitted as particles to the atmosphere...

Following the initial start-up of the human crematory, Evans Funeral Chapel and Cremation Services - White Marsh, P.A. is required to demonstrate initial compliance with all applicable air quality standards and apply for and obtain an air quality State Permit to Operate from the Department. To demonstrate initial compliance, the facility is required to use an independent third-party to conduct opacity tests, in accordance with EPA Method 9 testing requirements. Upon notification of final installation, post-construction inspections by the Air Quality Compliance Program will be conducted to ensure that the crematory was installed in accordance with the requirements of the air quality permit to construct. Air Quality Compliance Program staff are certified to conduct Method 9 opacity tests to verify on-going compliance following the initial third-party test. Following the issuance of a State Permit to Operate, the Air Quality Compliance Program will conduct a full compliance inspection to ensure that a source is not operating in violation of air quality regulations or permit conditions. These inspections generally include visible emissions observations by certified MOE staff and an odor survey. Records and logbooks on source operations, including continuous temperature monitoring records, maintenance records, and actions taken as required by the permit, are also reviewed. In addition to full compliance inspections, unannounced inspections are conducted at irregular intervals.

The facility is also required to certify all air pollution emissions annually and pay an emissions-based annual fee to the Department. Should a violation of any provision of a permit or a direct regulatory requirement occur, the Department has adequate legal authority to compel a facility to take the necessary measures to address the violation and bring the operation back into compliance. ...

A well-operated and maintained human crematory should not be a source of odors. The secondary combustion chamber is designed to fully combust all remaining gases, eliminating the emission odors. MDE reviewed its records for the last several years and found no record of an odor complaint associated with a crematory. The permit requires Evans Funeral Chapel and Cremation Services - White Marsh, P.A. to develop and maintain an Operations and Maintenance (O&M) Plan that must be reviewed and approved by the Department. The plan must include procedures that ensure proper operation and maintenance of the crematory. In the unlikely event this crematory causes odors, as noted earlier, the Department has adequate legal authority to compel compliance....

(Exhibit 46, Item 2)

(26) The Prince George's County Planning Department's (the "Planning Department") Environmental Planning Section issued a Standard Exemption Letter (NRI-075-2024) exempting the Application from the Woodland and Wildlife Habitat Conservation Ordinance because the Subject Property contains less than 10,000 square feet of woodland; there is no previously issued Tree Conservation Plan for the site; and, there are no on-site regulated environmental features. (Exhibit 33, Backup pp. 52-53) The Environmental Planning Section reviewed applicable provisions of the 2014 General Plan and the 2010 Master Plan and did not find substantial impairment of either primarily because there is no development proposed within the Green Infrastructure Network discussed within the 2017 Countywide Green Infrastructure Plan set forth within the 2017 Resource Conservation Plan, there is no floodplain on site, and the request is exempt from stormwater management requirements due to the limits of disturbance being less than 5,000 square feet and will not adversely affect water quality, (Exhibit 33, Backup pp. 64-67) It provided the following comments in closing:

Section 27-317(a)(7) of the Zoning Ordinance states that the [Zoning Hearing Examiner] may approve a SE if it finds that the regulated environmental features have been preserved and/or restored in a natural state to the fullest extent possible.... The site does not contain REF....

In accordance with Section 27-317 (a)(5) and (7), an approved Concept Plan (#41723-2024-SDC) was submitted with the application and shows that this project is exempt from stormwater management requirements because less than 5,00 square feet will be disturbed....

According to the U.S. Department of Agriculture ... Natural Resource Conservation Service Web Soil Survey, soils present include Sassafras-Urban land complex. According to available mapping information, unsafe soils containing Marlboro clay or Christiana complexes do not occur on this site. There are no geotechnical concerns with this application....

Development shall comply with the requirements for sedimentation and erosion control in accordance with Subtitle 32, Division 2 ... of the Prince George's County Code. The County requires the approval of an Erosion and Sediment Control Plan....

(Exhibit 33, Backup p. 68)

(27) The Planning Department's Community Planning Division opined that the request would not substantially impair the integrity of the 2010 Master Plan nor adversely affect the health, safety, or welfare of residents or workers in the area, and would satisfy the additional requirements for the use set forth in Section 27-357, for the following reasons:

The 2014 Plan Prince George's 2035 Approved General Plan (Plan 2035) places the application in the Established Communities. Plan 2035 states that, "Established communities are most appropriate for context-sensitive infill and low-to-medium density development. Plan 2035 recommends maintaining and enhancing existing public services (police and fire/EMA), public facilities (such as libraries, schools, parks, and open space), and infrastructure in these areas (such as sidewalks) to ensure that the needs of existing residents are met." (p. 20)

Analysis: Community Planning staff find the proposed application for Special Exception demonstrates a context-sensitive development, improvements to needed infrastructure, and the expansion or intensification of a critical public service to meet the needs of community residents....

The master plan recommends a **Low-Density Residential** land use on the subject property (Map 12, Approved Future Land Use for Subregion 1, p. 160).

The master plan does not provide a definition for Low Density Residential land uses. The 2014 Plan Prince George's 2035 Approved General Plan (Plan 2035) describes Low Density Residential land uses as "Residential areas up to 3.5 dwelling units per acre. Primarily single-family detached dwellings." (Table 14, Generalized Future Land Use Categories, p. 100).

The proposed onsite crematorium and expansion of mortuary services conforms to the master plan recommended future land use because a Funeral parlor or undertaking establishment is an allowed use under the Rural Residential (R-R) base zone, subject to the approval of a Special Exception, pursuant to Section 27-441, Uses Permitted. On October 1, 1981 - SE-3267 was recommended for approval for the Funeral Home and its associated parking. This prior Special Exception provides additional support for conformance to the master plan recommended future land use.

Economic Development

"Policy 1: Maintain and enhance the flex and industrial base of the master plan area to provide a stable job base, while improving compatibility with surrounding land uses.

Strategies

- Emphasize improved performance standards for minimizing noise and air pollution impacts, particularly for industrial users near residential areas." (p. 78)

Analysis: The applicant has provided substantial technical and model-specific information regarding the crematorium. The applicant has provided a list of other Funeral Homes utilizing the specific crematorium product; Matthews' Environmental Solutions Cremation Equipment. Many of the examples on the list are in similar residential contexts to the proposed application and demonstrates that the addition of the crematorium will be sensitive to environmental considerations with regards to energy

consumption, but also to the health and safety of the surrounding neighborhoods as the crematorium is being used.

The master plan places the property in the Beltsville living area. There are specific goals, policies, and strategies applicable to the Beltsville living area, and the subject property.

Beltsville Living Area

"Policy: Repair and Maintain Roads

Strategies

- Install streetscape improvements to include paved, pedestrian paths and safety features, lighting where needed, trees/landscaping, and curbs along Powder Mill Road from Gunpowder Road to US 1, Montgomery Road, Sellman Road, and US 1." (p. 114)

Analysis: The applicant has committed to providing pedestrian improvements on site and at the curb cuts at the driveway entrances to the subject property from Powder Mill Road. These pedestrian improvements include two crosswalks; the first located to the southeast portion of the subject property along powder mill road, and the second located north along Powder Mill Road. As there are two curb cuts leading into the subject property, these crosswalks will be critical to ensuring the safety of pedestrians along Powder Mill Road....

(Exhibit 33, Backup pp.71-72)

(28) The Planning Department's Subdivision Division provided the following comment:

The property subject to this special exception... is known as Part of Parcel 42, described in a deed recorded in the Prince George's County Land Records in Book 6210 page 566 dated 1985. The approximately 1.74- acre property is located in Tax Map 12, Grid F3.... The application was accepted for review on March 31, 2025.... This memo is based upon a submittal received on March 26, 2025....

There is no prior preliminary plan of subdivision (PPS) applicable to the property. The property is currently developed with [an] 8,101 square foot funeral home constructed in 1985, pursuant to prior special exception approvals.... [A] 3000 square foot office space and 1,400 square foot garage [were] approved on the property [in 1990].... However, the garage was not constructed, and a 3,101 square foot addition was constructed after January 1, 1990.

The total development proposed for the property does not exceed 5000 square feet of gross floor area. Per... the prior Subdivision Regulations, development of a property subdivided by deed prior to January 1, 1982, is restricted to a single-family detached dwelling, or 5000 square feet of gross floor area. The applicant proposes a second addition of 1,664 square feet on the property. The gross floor area (GFA) added after January 1, 1990, will be ... 4,765 square feet of GFA, which is less than 5000 square feet. Therefore, the proposed development is exempt from the requirement of filing a preliminary plan and final plat of subdivision. Any future development on the property may be ... [required to file] a PPS and final plat.

(Exhibit 33, Backup p. 59)

(29) The Planning Department's Transportation Planning Section noted that the request is subject to the 2009 Master Plan of Transportation and the 2010 Subregion I Master Plan, and provided the following comment:

The subject application proposes an addition to the existing funeral building for crematory use. the property fronts Powder Mill Road, which is a master planned collector roadway, [and] the plans are to be revised to delineate the ROW. The site is currently improved with existing sidewalk and a striped bicycle lane along the frontage of Powder Mill Road, meeting the intent of the master planned bicycle and pedestrian facilities. The recommended marked crosswalks at the driveway entrances are conditioned to be shown on the site plan. The site also exceeds the minimum required parking and loading. Staff find the subject application does not impair the integrity of the approved Master Plans....(Exhibit 33, Backup p. 62)

(30) The Planning Department's Historic Preservation Section stated that none of the Master Plan's goals and policies related to historic preservation are specific to the Subject Property or the proposed development, and opined as follows:

The subject property was included in the 1980 preliminary archeological assessment of the Inter-County Connector alignment...[and] no archeological sites were identified. There are no Prince George's County Historic Sites or resources on or adjacent to the subject property. Historic Preservation staff recommends the approval of SE-4848....

(Exhibit 33, Backup p. 69)

(31) The Technical Staff ultimately recommended approval of the request with conditions, addressed below.

LAW APPLICABLE

(1) A Funeral Home and Crematory are permitted as a Special Exception in the R-R Zone by Section 27-441 in accordance with Sections 27-317, Section 27-341, and Section 27-357 of the Zoning Ordinance.

(2) Section 27-317 provides:

(a) A Special Exception may be approved if:

- (1) The proposed use and site plan are in harmony with the purpose of this Subtitle;
- (2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;
- (3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan;
- (4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;

- (5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and
 - (6) The proposed site plan is in conformance with an approved Type 2 Tree Conservation Plan; and
 - (7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5).
- (b) In addition to the above required findings, in a Chesapeake Bay Critical Area Overlay Zone, a Special Exception shall not be granted:
- (1) where the existing lot coverage in the CBCA exceeds that allowed by this Subtitle, or
 - (2) where granting the Special Exception would result in a net increase in the existing lot coverage in the CBCA.
- (3) Section 27-341(a)(1) states:

A cemetery (including an animal cemetery) or a crematory may be permitted, provided that the use shall not be located within any proposed street or other public right-of-way, notwithstanding Section 27-259.

- (4) Section 27-357 (a) provides as follows:
- (1) A funeral parlor or undertaking establishment may be permitted subject to the following:
The minimum side and rear yard setbacks shall be at least fifty (50) feet each, when adjoining land in any Residential Zone, or land proposed to be used for residential purposes on an approved Basic Plan for a Comprehensive Design Zone, approved Official Plan for an R-P-C Zone, or any approved Conceptual or Detailed Site Plan;
 - (2) If the subject property is located in a Residential Zone, it shall contain at least one and one-half (1 1/2) contiguous acres;
 - (3) The use shall not depreciate the value of neighboring properties;
 - (4) The use shall not adversely affect the character of neighboring properties; and
 - (5) The use shall not create undue traffic congestion.

Burden of Proof

(5) The Court of Appeals of Maryland has frequently expressed the applicable standards for judicial review of the grant or denial of a Special Exception use. The Special Exception use is a part of the comprehensive zoning plan sharing the presumption that, as such, it is in the interest of the general welfare, and therefore, valid. The Special Exception use is a valid zoning mechanism that delegates to an administrative board a limited authority to allow enumerated uses which the legislature has determined to be permissible absent any fact or circumstance negating this presumption. The duties given the Board are to judge whether the neighboring properties in the general neighborhood would be adversely affected and whether the use in the particular case is in harmony with the general purpose and intent of the Plan.

The Applicant has the burden of adducing testimony which will show that his use meets the prescribed standards and requirements, he does not have the burden of establishing affirmatively that his proposed use would be a benefit to the community. If he shows to the satisfaction of the Board that the proposed use would be conducted without real detriment to the neighborhood and would not actually adversely affect the public interest, he has met his burden. The extent of any harm or disturbance to the neighboring area and uses is, of course, material. If the evidence makes the question of harm or disturbance or the question of the disruption of the harmony of the comprehensive plan of zoning fairly debatable, the matter is one for the Board to decide. But if there is no probative evidence of harm or disturbance in light of the nature of the zone involved or of factors causing disharmony to the operation of the comprehensive plan, a denial of an application for a Special Exception use is arbitrary, capricious, and illegal. Turner v. Hammond, 270 Md. 41, 54-55, 310 A.2d 543, 550-51 (1973); Rockville Fuel & Feed Co. v. Board of Appeals of Gaithersburg, 257 Md. 183, 187-88, 262 A.2d 499, 502 (1970); Montgomery County v. Merlands Club, Inc., 202 Md. 279, 287, 96 A.2d 261, 264 (1953); Anderson v. Sawyer, 23 Md. App. 612, 617, 329 A.2d 716, 720 (1974). These standards dictate that if a requested Special Exception use is properly determined to have an adverse effect upon neighboring properties in the general area, it must be denied. Schultz v. Pritts, 291 Md. 1, 432 A.2d 1319, 1325 (1981). See also Mossberg V. Montgomery County, 107 Md. App. 1, 666 A.2d 1253 (1995).

(6) The appropriate standard to be used in determining whether a requested Special Exception use would have an adverse effect and, therefore, should be denied is whether there are facts and circumstances that show that the particular use proposed and the particular location proposed would have any adverse effects above and beyond those inherently associated with such a Special Exception use irrespective of its location within the zone. Turner v. Hammond, 270 Md. 41, 54-55, 310 A.2d 543, 550-51 (1973); Deen v. Baltimore Gas & Electric Co., 240 Md. 317, 330-31; 214 A.2d 146, 153 (1965); Anderson v. Sawyer, 23 Md. App. 612, 617-18, 329 A.2d 716, 720, 724 (1974). Schultz v. Pritts, 291 Md. 1, 432 A.2d 1319, 1331 (1981). See also Mossberg v. Montgomery County, 107 Md. App. 1, 666 A.2d 1253 (1995).

CONCLUSIONS OF LAW

(1) The general purposes of the Zoning Ordinance are listed in §27-102(a), and Special Exception 4848 is in harmony with these purposes:

- (1) *To protect and promote the health, safety, morals, comfort, convenience and welfare of the present and future inhabitants of the County;*

This proposal will enable the Applicant to provide a Crematory to better serve those seeking funeral services, thereby promoting the comfort and convenience of the County's inhabitants.

- (2) *To implement the General Plan, Area Master Plans, and Functional Master Plans;*

The General Plan encourages this context-sensitive infill development on a site currently improved with a Funeral Home. The Master Plan's policy of having new development be compatible with the current character of the neighborhood is furthered as the addition is relatively small, its designs and materials match those of the Funeral Home and complement the surrounding development, and its chimney stacks will be relatively hidden from surrounding development. Policies within other Functional Master Plans are furthered as fully discussed in Mr. Ferguson's Land Planning Analysis and the Technical Staff Report. (Exhibits 33 and 44)

- (3) *To promote the conservation, creation and expansion of communities that will be developed with adequate public facilities and services;*

The Applicant is proposing the addition of a 1,664-square-foot Crematory to an existing Funeral Home that has operated on the site for many years. The expansion is so small that a new preliminary plan of subdivision is not required. Accordingly, this purpose is met.

- (4) *To guide the orderly growth and development of the County, while recognizing the needs of agriculture, housing, industry and business;*

This proposal will allow this established Funeral Home to add its own crematory on site, and not continue to outsource requests for cremation, and the new use will only be 1,664 square feet. This will both recognize the needs of the industry and allow orderly growth on the site.

- (5) *To provide for adequate light, air, and privacy;*

Adequate natural light, air and privacy will be maintained on this fairly large site since the relatively small Crematory will not diminish the setbacks between the subject property and neighboring properties and meets height limitations.

- (6) *To promote the most beneficial relationship between the uses of land and buildings and protect landowners from the adverse impacts of adjoining development;*

This proposal will not alter the established beneficial relationship between land uses, as it is for the granting of a Special Exception to permit a small addition to a developed site and conforms with the provisions of the County Code, in general, and the Zoning Ordinance, specifically.

- (7) *To protect the County from fire, flood, panic and other dangers;*

This proposal will not result in the creation of a dangerous situation as the new Crematory addition will meet all applicable safety regulations of the County, State and Federal governments via the permit review process.

- (8) *To provide sound, sanitary housing in a suitable and healthy living environment within the economic reach of all County residents;*

As this proposal is for the granting of a Special Exception to permit the addition of a Crematory, this purpose does not apply.

- (9) *To encourage economic development activities that provide desirable employment and a broad, protected tax base;*

This proposal will continue provide employment opportunities in harmony with this purpose.

- (10) *To prevent overcrowding of the land;*

This proposal will not overcrowd the land as it brings the total lot coverage to 58 percent, less than the maximum 60 percent permitted.

- (11) *To lessen the danger and congestion of traffic on the streets, and to insure the continued usefulness of all elements of the transportation system for their planned functions;*

The granting of the proposed Special Exception will neither alter the relationship of the existing Funeral Home use to the streets, nor change that use.

- (12) *To [ensure] the social and economic stability of all parts of the County;*

This proposal is to allow the existing Funeral Home to modernize its facilities by adding a crematory in conformance with the requirements of the Zoning Ordinance.

- (13) *To protect against undue noise, and air and water pollution, and to encourage the preservation of valleys, steep slopes, lands of natural beauty, dense forests, scenic vistas and other similar features;*

The use will have no substantial impact to the natural features in the County as it will be located on a developed site without regulated environmental features; the requisite air quality permit must be obtained from MDE before the Crematory can be constructed thereby reducing the possibility of air pollution; and it is exempt from the County's woodland conservation policies due to its lack of impact upon existing woodlands.

- (14) *To provide open space to protect scenic beauty and natural features of the County, as well as provide recreational space; and*

(15) *To protect and conserve the agricultural industry and natural resources.*

This proposal is an infill development that will continue the use of the subject property as a Funeral Home and add a relatively small Crematory. These two purposes are not directly applicable, but this small addition will be infill development and will not detract from the scenic beauty or natural features of the County, nor its natural resources or agricultural industry.

The specific purposes of the R-R Zone listed in Section 27-428(a)(1) are:

- (A) To provide for and encourage variation in the size, shape, and width of one-family detached residential subdivision lots, in order to better utilize the natural terrain;
- (B) To facilitate the planning of one-family residential developments with moderately large lots and dwellings of various sizes and styles;
- (C) To encourage the preservation of trees and open spaces; and
- (D) To prevent soil erosion and stream valley flooding.

The request is in harmony with these purposes because there will be very little disturbance on the site, thereby preserving trees, and preventing any soil erosion or stream valley flooding.

(Section 27-317(a)(1))

(3) No variances or departures are required as all bulk regulations are met. (Section 27-317(a)(2))

(4) The proposed Crematory and continued operation of the existing Funeral Home will not impair the integrity of the approved Master Plan for Subregion 1 and the applicable Functional Master Plans, for the reasons noted above. (Section 27-317(a)(3)).

(5) No evidence is in the record which would support a conclusion that the proposed Crematory and continued operation of the existing Funeral Home would either adversely affect the health, safety or welfare of residents or workers in the area or that it would be detrimental to the use or development of adjacent properties or the general neighborhood, once the conditions, *infra*, are met. Again, the Funeral Home is not being changed. The prior Examiner and District Council found that it did not depreciate the value of neighboring properties, nor adversely impact the neighborhood. It has successfully operated on the site for decades. And the prior approval for that use should remain in effect.

The Opposition are not opposed to the continued operation of the Funeral Home, describing it as a good neighbor all of these years. However, they were rightfully concerned with the emissions generated by Crematories. However, Matthews is contracted to provide the equipment and services for Applicant. The information provided

concerning MDE's review of an Air Quality Permit request by a Crematory that planned to use Matthews equipment shows the stringent standards required for Crematories by the State and the federal government should assuage concerns because the instant request will have to undergo the same stringent vetting, and a condition to that effect is addressed below.

Since the District Council permits this use, subject to Special Exception approval, and since a condition of such approval is that the MDE has an opportunity to vet the use and issue the Air Quality Permit, there is nothing in the record to indicate any adverse impact on the surrounding properties in the former R-R Zone other than those usually generated by this type of use will occur. (Sections 27-317(a)(4) and (5))

(6) The subject property is exempt from the Prince George's County Woodland Conservation and Tree Preservation Ordinance, as noted above. (Section 27-317(a)(6))

(7) There are no regulated environmental features on the site. (Section 27-317(a)(7))

(8) The subject property does not lie within the Chesapeake Bay Critical Area Overlay Zone. (Section 27-317(b))

(9) The Funeral Home and Crematory are set back more than fifty feet from adjoining land in a residential zone on all sides; the property contains 1.74 acres; the Funeral Home has been found not to depreciate the value of neighboring properties; it has similarly been found not to adversely affect the character of neighboring properties; and the addition of the Crematory will arguable reduce the traffic that comes to the site so the prior finding that the Funeral Home use not create undue traffic congestion should stand. (Section 27-357(a)(1)-(5))

(10) No portion of the site lies within any proposed street or public right-of-way. (Section 27-341(a)(1))

DISPOSITION

Special Exception 4848 for a Funeral Parlor and Crematory is APPROVED, subject to the following conditions:

1. Prior to certification of the special exception site plan, the following revisions shall be made:

a. Revise "Zone 1" of the Tree Canopy Coverage schedule to reflect the current Residential, Rural (RR) Zone, instead of the R-R (Rural Residential) Zone.

b. Provide a landscape schedule in accordance with Section 4.9, Sustainable Landscaping requirements, of the 2010 Prince George's County Landscape Manual, on the plans demonstrating proposed plant materials will be in conformance with the sustainable landscape requirements.

- c. Provide the width of the lot at the building line and street line on the special exception site plan.
 - d. Provide the required and proposed lot coverage on the special exception site plan and demonstrate the site does not exceed the maximum requirement.
 - e. Update the landscape plan to reflect the requirements of Alternative Compliance AC-95015, and to reflect existing and proposed plant materials on-site.
 - f. Add a note to the site plan indicating that the chimney height shall be consistent with the requirements of an approved Air Quality Permit to Construct issued by the Maryland Department of the Environment.
 - g. A Note shall be added to state that the queuing of all processional vehicles, must occur within the parking area on-site.
 - h. A Note shall be added to state that weekday funeral processions be limited between the hours of 10:00 a.m. and 4:00 p.m. to avoid peak traffic hours, and that Crematory operations shall be between the hours of 8:00 a.m to 6:00 p.m.
2. Prior to issuance of a building permit for the crematory facility, the Applicant shall provide a copy of an approved Air Quality Permit to Construct issued by the Maryland Department of the Environment.

[Note: The Special Exception Site and Landscape Plan is Exhibit]

**DISTRICT COUNCIL FOR PRINCE GEORGE'S COUNTY, MARYLAND
OFFICE OF THE ZONING HEARING EXAMINER**

**SPECIAL EXCEPTION
4848**

DECISION

Application:	Crematory added to existing Funeral Parlor
Applicant:	Donald V. Borgwardt Funeral Home, P.A.
Opposition:	Deborah Baggett and Steven Smith
Hearing Date:	October 8, 2025
Decision Date:	January 07, 2026
Hearing Examiner:	Maurene Epps McNeil
Disposition:	Approval with Conditions

NATURE OF PROCEEDINGS

- (1) Special Exception 4848 is a request for permission to expand an existing 8,101-square-foot Funeral Home¹, accessory structure and associated parking by adding a 1,664-square-foot crematory on 1.74 acres of RR (Rural Residential) zoned land, identified as 4400 Powder Mill Road, Beltsville, Maryland. All of the Subject Property was included in the prior Special Exceptions approved for the Crematory (SE-3267 and SE-3988).
- (2) Ms. Deborah Baggett and her husband, Steven Smith, appeared in opposition to the request.
- (3) The Technical Staff recommended approval with conditions. (Exhibit 33)
- (4) The record, consisting of 55 Exhibits and one hearing transcript, closed on October 8, 2025.

FINDINGS OF FACT

Subject Property

- (1) The subject property is a 1.74-acre that is in the R-R (now RR) Zone and has been since the inception of zoning in 1949. (Exhibit 38, p. 2) The Funeral Home has been in operation since the early 1980s. Applicant provided a complete recitation of the site's

1 Applicant has opted to have the request reviewed under the regulations for the R-R (Rural Residential) Zone in the prior Edition of the Zoning Ordinance, as permitted by Section 27-1900, et. seq., of the current Edition. The correct term in both the current and prior Editions of the Zoning Ordinance is "Funeral Parlor or Undertaking Establishment". The record also often refers to it as "Funeral Home".

zoning history and prior approvals in its Statement of Justification. (Exhibit 6) Copies of the prior approvals were also included in the record. (Exhibits 28, 29, 33 (Backup), 38, and 39)

(2) The subject property is improved with the 8,101-square-foot Funeral Home and associated parking, fencing, and landscaping. (Exhibit 33, PowerPoint Slides 1 and 7)

Surrounding Area and Neighborhood

(3) The immediate uses surrounding the subject property are as follows:

- North - The terminus of Caverly Place and the side yard of single-family detached dwellings in the RSF-95 (Residential, Single-Family-95) Zone, and formerly in the R-80 (One-Family Detached Residential) Zone
- East - The rear yards of single-family detached dwellings in the RMF-20 (Residential, Multifamily-20) Zone, and formerly in the R-18 (Multifamily Medium Density Residential) Zone
- South - Single-family detached dwellings in the RR, and formerly in the R-R Zone
- West - Single-family detached dwellings in the RSF-95 (Residential, Single-Family-95) Zone, and formerly in the R-80 (One-Family Detached Residential) Zone

(4) The Technical Staff defines the neighborhood as follows:²

- North - Ammendale Road
- East - Lincoln Avenue North and Emack Road
- South - Greenwood Road and Kenny Street
- West - 34th Place and Old Gunpowder Road

Master Plan/General Plan/

² This is the same neighborhood accepted in prior approvals, and the Applicant's witness, accepted as an expert in land use planning, agrees with these boundaries. (Exhibit 44)

(5) The Subject Property lies within Planning Area 61, discussed within the 2010 Approved Subregion 1 Master Plan ("Master Plan") and Sectional Map Amendment ("SMA"). The Master Plan's Land Use Map designated the site for "Low Density" future land use. (Master Plan, p. 160; Exhibit 44, p. 3) The Master Plan included goals to preserve and maintain residential areas, to achieve efficient access to residential, commercial, and employment areas by improvements to roadways, and to minimize dislocation and disruption. (Master Plan pp. 13 and 45)

(6) The 2014 General Plan places the property within the Established Communities category, and its Generalized Future Land Use Map designates it for Residential-Low land use. The Established Communities are the "existing residential neighborhoods and commercial areas served by public water and sewer outside of the Regional Transit Districts and Local Centers." (2014 General Plan, p. 20) The General Plan notes that "Established Communities are most appropriate for context-sensitive infill and low-to medium-density development." (2014 General Plan, p. 20)

Applicant's Proposal

(7) Applicant Donald V. Borgwardt Funeral Home, P.A., is a professional association certified to conduct business within the State of Maryland. (Exhibit 35) Mr. Donald Borgwardt is the President of the Association and has been authorized to speak on its behalf. (Exhibit 50)

(8) The subject property consists of one unsubdivided tax parcel, which is developed with the existing Borgwardt Funeral Home and its associated landscaping, fencing, and off-street parking facilities. The instant request is to add 1,664 square feet to accommodate the addition of a Crematory. There will be no intensification of the existing Funeral Home or alteration of the site beyond the footprint of the Crematory and some minor landscape planting.

(9) Mr. Donald Borgwardt, sole owner of Borgwardt Funeral Home, is licensed by the State of Maryland and Washington, D.C. as a funeral director. He has operated a funeral home on the subject property for approximately 41 years, in accordance with SE-3267 and SE-3988, and the variance and alternative compliance granted by the Board of Appeals and Planning Board/Staff, respectively. Mr. Borgwardt agreed to have the conditions attached to the prior approvals apply to the renewed Special Exception if approved. (T.15) The witness testified that there have been no complaints by the neighbors concerning the existing funeral home over the years. He also noted there have been fewer on-site funerals over time, and he believes this is because the visitation and service are often held on the same day, and because more people are being cremated. (T.17)

(10) Ms. Donna Mabry, Mr. Borgwardt's daughter and a licensed funeral director and mortician, testified that they currently use a third-party provider located in Virginia to

perform cremations, and they've experienced an increase in cremation requests over the years. (T.19–21)

(11) Mr. Borgwardt explained that the funeral home has been able to provide 100–165 cremations annually, using a third-party service located in Virginia. If approved, he does not intend to provide the service to persons from Virginia or D.C. unless one of his funeral directors requires help with cremation duties due to a malfunction with their own cremation equipment. (T.26) Upon cross-examination, Mr. Borgwardt admitted that they would be using the crematory during weekend hours, but Ms. Mabry explained that it would still occur within their business hours, although the business hours of operation were not provided. (T.22–23) Cremations take “anywhere from 45 minutes to a couple of hours” to perform, and Mr. Borgwardt testified this would limit the number done daily and he “does not see where the business is going to climb to [performing cremations] every day.” (T. 31)

(12) Mr. Mike Novy, a civil engineer with Atwell, was accepted as an expert in the area of civil engineering. He oversaw the preparation of all the site plans submitted for the review of the Application. (T.34) He provided the following testimony in support of the request:

The site plan is in conformance with the County Code and ... also the landscape plan. We meet all the setbacks, parking requirements, lot coverage,[and] tree canopy coverage So, everything is in conformance with the ... Code....

The existing structure is ...in two parts. [T]he first one was 5,000 square feet, [and] was built prior to 1990. An addition was added of 3,101 square feet. And then we're proposing the addition of 1,664 square feet for this [Crematory]. So since 1990, the square footage is less than 5,000 square feet in addition. So, it is exempt from the subdivision regulations....

(T. 37-38) Upon cross-examination, Mr. Novy admitted that his opinion that the addition and the funeral home satisfy all required provisions of the Zoning Ordinance is limited to the civil engineering outside of the footprint of the building. (T.43)

(13) Mr. Ronald Lipford, accepted as an expert in the area of architecture, explained the changes to the site using the architectural elevations. (Exhibit 5) The front view shows the addition and the crematory chimney. The south elevation has the addition on the right-hand side and the two chimney stacks. (T.46–47) The north elevation shows the profile of the existing funeral home with the addition to the left. The east elevation shows the side of the addition. Again, both elevations match the existing profile and material of the funeral home in terms of height and character, even to the point where the metal gutters and downspouts, as well as the brick color, will match the character of the elevations. (T. 48-49) The witness noted that the height of the chimney stacks may change if required by the Maryland Department of the Environment. (T.50)

(14) Mr. Michael Lenhart, accepted as an expert in transportation planning, testified in support of the Application and prepared a Traffic Memorandum. (Exhibit 31) Mr. Lenhart

explained that he relied upon the Maryland-National Capital Park and Planning Commission's Transportation Guidelines and the Institute for Transportation Engineers ("ITE") Trip Generation Manual in his assessment of the traffic impact that would occur if the 1,664 square foot Crematory is approved. Neither document has a specific trip generation for a Crematory, so he looked at the most similar use, a Funeral Home. This "is [a] common [practice] when you don't have technical materials for backup." (T. 61) He then offered the following justification for his opinion that the use would not have an adverse impact on traffic in the area:

The existing ... funeral home has a floor area of 8,101 square feet on 1.7 acres of land. The proposed crematorium will add an additional 1,664 square feet of developed space to a site with no change to the acreage of the site. The ITE Trip Generation Manual, 11th Edition, does not include a land use that accurately matches the description of a crematorium; however, the crematorium would provide an additional service for [the] existing funeral home. More specifically, a funeral home is a business that provides services for the deceased and their families, including preparation of the body, planning the funeral, and offering support. The preparation and support include burial or cremation services. When a body is processed for burial services, this often includes a procession of vehicles from the funeral home to the cemetery. However, when a body is processed for cremation, there would be no procession of vehicles from the funeral home to the cemetery. Given this, it can be reasonably assumed that the proposed crematory may actually result in a decrease in traffic generated by the site due to the reduction in cemetery services....

[Section 27-357(a)(5) of the Zoning Ordinance] reads that "The use shall not create undue traffic congestion." As discussed above, the proposed crematorium will not have an adverse impact on trips to/from the site and may actually reduce the traffic generated by the funeral home. Therefore, this requirement is met....

(Exhibit 31)

(14) Mr. Lenhart further expounded upon his opinion that the addition of a Crematory would not cause undue traffic congestion in his testimony at the hearing:

[If there was no decrease in the number of funerals] you could assume that there would be a slight increase [in traffic].... [However] there's ... several hours or so for one cremation. You may have a few people come in to identify the body or whatever is needed to get through the services. It would still be a de minimis increase over and above what was occurring if the funeral services were occurring at the same time. And... the use shall not create undue traffic congestion. There ... could be a de minimis increase, but nothing that would cause any traffic concerns....

(T. 64-65)

(15) Mr. Lenhart admitted that he did not know the number of employees at the funeral Home and, therefore, did not consider them in his analysis. (T.65) Upon redirect, Mr. Burghardt noted that the Funeral Home currently employs eight people, and the number is likely to remain unchanged if the request is approved, as they plan to have one of the existing employees licensed to perform cremations, and eventually all will be licensed. (T.

67) He further stated that no more than one cremation at a time may be performed pursuant to State law. (T. 68)

(16) Mr. Barry Burczyk is an equipment consultant for Matthews Environmental Solutions, a part of Matthews International ("Matthews"). He also holds a business degree in marketing and economics. (T.100) The company manufactures cremation equipment. Mr. Burczyk provided testimony relying on Exhibit 46 (the Maryland Department of Environment's ("MDE") final determination on an Air Quality Permit for a Crematory to be operated in conjunction with Evans Funeral Home, one of his clients), Exhibit 47 (the manufacturer's statement on emissions from cremation equipment), and Exhibit 26 (a partial list of Maryland funeral homes that use Matthews' services). (T. 99) One of his responsibilities is to supply information about crematory services to the permitting authorities, in this instance MDE. He has worked with several state permitting authorities and rates Maryland "in the top two or three in terms of what they require, very stringent in our equipment." (T. 102) Part of the State's criteria include third-party testing and emissions reports, and public hearings are held on the permit application. (T.102) Mr. Burczyk further described the State's permitting process as "[taking] at least nine months, [b]ut ..., depending on public hearings and other involved programs, it could be years...." (T. 104)

(17) The following excerpt of the direct questioning by Mr. Shipley and testimony of Mr. Burczyk explains the crematory equipment to be installed if the request is approved:

Q Okay if you're personally aware of this, do you know of your own knowledge whether or not MDE continues to have jurisdiction over the crematory, even though a permit has been issued for it?

A One hundred percent. Annual inspections are required, licensing, and ... preventative maintenance inspections by the manufacturer of the unit, [with] very stringent record-keeping for their needs.

Q Now, you're an employee of Matthews?

A That's correct.

Q Do you know approximately how many crematoriums they have provided throughout the United States?

A Well, we are the leading manufacturer of the units' market right now. We're about seventy percent of the market worldwide in over 5,000 units, with the majority of those in the U.S.

Q Okay. Could you take us through the process of what this unit looks like? How the process is carried out?

A Sure.... I guess the engineering of the unit, there's again – I mentioned two chambers, an upper and lower chamber [What] we refer to sometimes as the case is inserted into the primary chamber. It has a high temperature refractory lining that insulates the unit. That door closes. The cremation starts. The cremation typically is in a corrugated cardboard box, for lack of a better term.

There's a burner that begins the cremation in that chamber, and the cremation proceeds.... [T]he unit has a computerized control that can monitor, regulate, adjust temperatures and air supply. So as that cremation is occurring, the products of combustion go down into the secondary chamber where a secondary burner is destroying those products of combustion, and then again ... holding them for retention

time that is required and then finally for emitting out the flue or stack. The units are UL certified. We've been making them for more than 70 years.

Q What's UL mean?

A Underwriter Laboratory ... and that the unit ... completely... conforms with that requirement.... They're [an] agency that certifies equipment....

Q [A]t the Borgwardt Funeral Home, if this application is granted and they proceed to get a permit to conduct cremations, will there just be one unit used?

A There's a single unit that is being discussed.

Q And as ... Mr. Borgwardt actually uses the process - does Matthews have an ability to monitor?

A Absolutely....[We have a] control system ... called MPYRE. That is monitored 24/7, 365, [and] the operator at any time can instantly push a button if he wants to connect with a support team. If any type of trigger or alarm would go on, we would be alerted to that, and our technicians would be in contact with the operator on that within minutes.

Q So if something went wrong, could you, from Florida, shut the unit down?

A We could, and we could make adjustments also.

Q Okay. And could the operator at the funeral home – the licensed operator ... - could they also shut it down?

A Absolutely. They have full autonomy for operation of that unit....[I would say there is rarely a shut down for malfunction.] There's – in the combustion process of heat and air – flame and air- the air can be adjusted to accommodate differences in bodies. Obese cases have a lot of natural fuel. So there's adjustments that can be made depending on the type of individual being cremated.... I would say [it's] extremely rare [for one of these units to be shut down.]

(T. 106- 110)

(18) Mr. Burczyk explained that he was involved with the Evans Funeral Home application and hearing for a State permit to construct and operate a Crematorium, and that a similar process would be required if the instant request is approved. (Exhibit 46, T. 111-112) He also noted that Matthews would offer training to the Applicant, or there could be training provided by the Cremation Association of North America, and Matthews' technicians would be available for in-person training. (T. 112-113) He stated that Matthews has entered into a contract with the Applicant to provide its services. (T. 113) Upon cross-examination by Mr. Smith, it was stressed that over two hours of the hearing before MDE on the Evans Funeral Home request for approval of a crematory centered on mercury emission rates and the need to limit Evans to no more than two cremations in an 8-hour period. (Exhibit 46; T. 115-116) Upon cross-examination by Mr. Brown, it was revealed that Applicant has requested equipment that could handle approximately 700-750 cremations annually. (T. 120)

(19) Mr. Mark Ferguson, accepted as an expert in the area of land use planning, testified in support of the request and prepared a Land Planning Analysis. (Exhibit 44) The Analysis comprehensively addressed the application's compliance with the criteria for approval found in Sections 27-317, 27-341, and 27-357 of the Prince George's County Code. The Analysis first described the application's compliance with Sections 27-317 (a)(1) and (2):

There are no regulated environmental features on or adjacent to the subject property.

The subject property is located on the north side of Powder Mill Road, a collector roadway. The existing funeral home has access from Powder Mill Road via two entrance points. There are recently constructed stormwater management facilities in the right-of-way of Powder Mill Road in the front of the subject property....

A historic site, the Orme-Shaw House (County Site #61-002), is 900 feet south of the subject property, beyond the limits of the defined neighborhood, and its site and the subject property are not intervisible....

Section 27-317(a)[(1)] ... provides that a Special Exception may be approved if ... the proposed use and site plan are in harmony with the purposes of [the Zoning Ordinance].... The ... subject property [is in harmony with the fifteen purposes of the prior zoning ordinance]....

In allowing for the expansion of the existing, active land use of the funeral home to include the ability to provide cremation services, approval of the subject application will promote the health, safety, morals, comfort, convenience and welfare of the inhabitants of the County by providing for a safe, sanitary and less costly alternative to interment of the deceased....

[The subject property implements the applicable plans....] [T]he General Plan classified the subject site ... in the Established Communities category... and recommends that 'Established communities are most appropriate for context-sensitive infill and low-to medium-density development....' [T]he approval of the subject application would be context-sensitive infill development by virtue of (1) the compatible architectural design of the proposed addition; and (2) by virtue of the long existence of this use on the subject property....

The Master Plan ... 'Future Land Use' map recommends the subject property and the entirety of the defined neighborhood for 'Residential Low' land use.... The proposed expansion will implement [applicable]... strategies by proposing a very modest addition to the existing building, replicating the scale and character of the existing building, which is itself of comparable scale..., [and it does] maintain ... [collector roadway C-112] as required by current and future development....

The special exception area does not contain any area of Regulated Areas of the County's Green Infrastructure Network, and as such will not impair the Green Infrastructure Plan, and its compliance with the Tree Canopy Coverage Ordinance will further ... Policy 7, to 'preserve, enhance, connect, and restore forest and tree canopy coverage'....

[T]he property containing the Orme-Shaw House (County Historic Site #61-002) is located approximately nine hundred feet south of the subject property. That site and the subject property are not intervisible; thus, the approval of the instant application will be in harmony with the purpose of the prior zoning ordinance to implement [the Historic Sites and Districts Plan]....

The 2009 Countywide Master Plan of Transportation as amended by the 2010 Subregion 1 Master Plan classifies Powder Mill Road as a collector roadway (C-112) with two lanes

in an 80'-100' right-of-way, though it notes that in the area of the subject property, the required right-of-way may be reduced to as little as sixty feet. This configuration is shown on the Special Exception Site Plan. The Master Plan of Transportation also proposes a bike lane on Powder Mill Road.

(Exhibit 44, pp. 4-7)

(20) The Analysis next addressed compliance with the remaining applicable purposes found in Section 27-317 (a) (3)-(15) and Section 27-428(a)(1), summarized as follows:

- Due to the de minimis changes to the site, approval of the request will not impair the purpose of promoting the conservation of the community, which will be developed with adequate public facilities.
- The addition of the small Crematory fulfills the need of an existing successful County business, thereby promoting the orderly development of the County.
- The Crematory would be constructed in accordance with the various regulations of the Zoning Ordinance to ensure the provisions of adequate light, air, and privacy.
- For similar reasons, the request would promote the most beneficial relationship between the uses of land and buildings and protect the neighbors from any adverse impact.
- The Crematory will be constructed in accordance with all County laws enacted to protect the County from flood, fire, panic, and other dangers (such as the floodplain and stormwater management regulations, the fire prevention and building codes, and the table of uses in the Zoning Ordinance).
- The request will provide employment opportunities to construct the Crematory, and employees to operate it, thereby providing employment and contributing to the tax base.
- The request will be constructed in accordance with all regulations that will prevent the overcrowding of land.
- The Special Exception will continue to operate with sufficient off-street parking, and the Crematory is located in an area on site that should minimize new traffic on the adjacent roadways and may reduce traffic since cremation should reduce the need for long vehicular processions from the site to a cemetery.
- Since the use will satisfy all applicable requirements of the Zoning Ordinance, and the Zoning Ordinance is a tool for the implementation of the planning goal to ensure the social and economic stability of the County, the request is in harmony with this goal.
- The use meets the purpose that it protect against undue noise, air and water pollution, and preserve, stream valleys, steep slopes, dense forests, scenic vistas, and other similar features, due to its location on a developed site without regulated environmental features, its exemption from the requirement to submit a Type 2

Tree Conservation Plan, no impact on steep slopes or scenic vistas, utilization of modern crematory equipment, and the requirement that it receive an air quality permit from the Maryland Department of the Environment.

- The purposes of the R-R Zone are met since the crematory will not affect the existing woodlands, the application is exempt from the requirement to file a tree conservation plan, and there will be de minimis land disturbance and, therefore, little possibility of soil erosion or stream valley flooding.

(Exhibit 44, pp. 4-11)

(21) Mr. Ferguson found that the remaining provisions of Section 27-317 of the Zoning Ordinance were met since: if the prior approvals and conditions remain in effect the proposed expanded use would remain in conformance with all of the applicable requirements of the prior Edition of the Zoning Ordinance (Section 27-317 (a)(2)); the use will not substantially impair the integrity of the Master Plan or applicable Functional Master Plan, as noted above (Section 27-317(a)(3)); the expanded use of the property will not adversely affect the health, safety, or welfare of residents or workers in the area because it will be developed in a manner that satisfies all applicable laws, and the existing Funeral Home would be more impactful due to its larger lot coverage and the increased traffic when in use but the District Council has already determined that use does not adversely impact the residents or workers in its prior approvals for the Funeral Home on site (Section 27-317 (a)(4)); the surrounding neighborhood is already developed, the proposed use is one already determined to not be detrimental to the use/development of adjacent properties and/or the neighborhood given its inclusion in the Table of Uses, and since the Funeral Home has already been found to meet this purpose so the less impactful Crematory should also have negligible impact on these properties (Section 27-317(a)(5)); the site is exempt from the requirement to provide a Tree Conservation Plan (Section 27-317(a)(6)); there are no regulated environmental features on the site (Section 27-317(a)(7)); and, the property does not lie within a Chesapeake Bay Critical Area Overlay Zone (Section 27-317(b)). (Exhibit 44, pp. 11-13)

(22) Mr. Ferguson also found compliance with the provisions in Sections 27-341 and 27-357. Section 27-341 requires that the Crematory not be located within any proposed street or other public right-of-way and the instant Crematory meets this requirement. Section 27-357 applies solely to the Funeral Home. It first requires 50-foot side and rear yard setbacks from all adjoining land in any residential zone or land proposed for residential purposes, as outlined in certain approved plans. The Funeral Home is set back more than fifty feet from all abutting land. (Section 27-357(a)(1)) The Funeral Home is required to be located on at least one and one-half contiguous acres, and the subject property contains approximately 1.74 acres. (Section 27-357 (a)(2)) There is nothing in the record to alter the original finding that the Funeral Home does not depreciate the value of neighboring properties, nor that it adversely affects the character of neighboring properties, and since the use has not changed, the prior findings should continue. (Sections 27-357(a)(3) and (4)). Finally, the Funeral Home was previously found to not create undue traffic congestion and “[s]ince the scope of the funeral home portion of the uses will not be expanded, and ... because the addition of a crematory

could potentially reduce existing traffic for the funeral home ... by removing the need for some of the long vehicular processions from the funeral home to the cemetery” the prior findings should stand. (Section 27-357(a)(5); Exhibit 44, pp. 13-14)

(23) Mr. Ferguson provided the following testimony to support his opinion that the request satisfies all of these provisions of the Zoning Ordinance:

I ... note that the prior special exception approvals ... did include grants of alternative compliance. One was associated with the [buffer for the]garage. The other was ... a departure from design standards, which was associated with ... the loading space.... [My] presumption is that those prior approvals would continue in force, as the substance of the funeral home use is not being changed.... The only physical alteration is for the crematory addition....

I did evaluate the General Plan – this is in the Established Communities – which recommends context-sensitive infill. And because of the harmoniousness of Mr. Lipford’s design in its modest scale, I do find ... it would be context-sensitive infill ... particularly given the long-established character of the existing funeral home use. The master plan’s recommendations are for low-density residential use....

And ... the additional requirements of 27-357, which speak to not affecting the character of the neighborhood, really speak to that intent of the ... master plan as well. and those findings ... have been made in ... both of the prior special exception cases for the funeral home use already....

It is ... first important to note that the table of uses does provide for the crematory use, ... [and] there are impacts that are necessarily and habitually associated with crematories.... And so ... the question of adverse effect ... for me, is related to, is this crematory disproportionate to other crematories? In my opinion, that is ... not the case, and I do base that partly on information ... published by the manufacturer [and]... included as Exhibit 47 ... which indicates that the ... scope of emissions on a time-constant basis is less than ... a wood stove....

My opinion was based on the fact that the emissions from modern crematories are modest in scope, certainly compared to other items which are regulated by MDE under the same provisions. So the ... air quality provisions in COMAR, for which you find crematories, are the same as those provided for incinerators – municipal waste incinerators. And this certainly is ... of a much, much, much smaller scale than those.

And I also condition my finding on the successful grant of an air quality permit from the Department of the Environment so that they, in fact, do the full review of the level of emissions from the crematory and can, in fact, make that finding of minimal adverse impact on the health, safety, and welfare of the neighborhood....

And so really the question is, would the ... proposed crematory adversely affect the use of adjacent properties? And again, I think the question has to be in a disproportionate way to ... crematories generically in the RR zone. And again, my opinion is no....

So based on all of those provisions of 27-317 and my opinions thereon, I conclude that this project would meet all of the requirements for approval of 37-317, the additional

requirements in 27-357 and 341 and would meet the Schultz test of not having a greater adverse impact here than it would at another site in the RR zone.

(T. 76- 81)

Opposition's concerns

(24) Mr. Stephen Smith and Ms. Baggett appeared in opposition to the request. They live on Caverly Avenue just beyond the three adjacent homes shown on the Special Exception Site Plan. (Exhibit 45; T. 92) Mr. Smith offered the following testimony in opposition to the Crematory:

[W]e have lived in this house since 1983.... When the funeral home was proposed, we were living in this house, and we did not object to the funeral home being located where it is.

And I would say that our concern about the crematory has nothing whatsoever to do with concerns about Mr. Borgwardt or his operation of the funeral home at all.... [W]e have nothing but good things to say about the operation of that establishment.... I think the uses as a crematory is vastly different, both in perception and reality, from the use ... as a funeral home....

In fact, when you look at the record, I know that there's discussion of the Evans Funeral Home and ... the proposed addition of the crematory there ... that was approved....But there's a long report there by MDE, Maryland Department of the Environment, about what particulates are in fact emitted from a crematory are in fact emitted from a crematory. And that ... was a Matthews crematory at issue in that case as well, and one of the reasons I asked about what we're getting into the height of the stacks, I believe in that case ... MDE required the stacks to be elevated to 38 feet, and that was because the extra height of the stacks apparently gives more opportunity for the emissions to be burned up.

And ... it's a good thing they have a better opportunity to get burned up and not be emitted into the atmosphere, but at the same time, it makes me even more suspect of what is getting burned up and ... ultimately what's going into the atmosphere.

I'm concerned about the potential impact on the value of residential homes in the neighborhood.... [I]f I was coming into a neighborhood to buy a home and was aware that there's a crematory next door, I very most likely would not pursue that purchase, and that's because of my perception. I don't have to go do a bunch of research. I think that's a perception that a lot of folks have, and ... I think that's a very common perception. It's something that I think should be taken into account when considering whether or not the issue should be permitted.

The... last point I want to make is simply that I asked about the other crematorium that exists in Beltsville. It's located in Beltsville Industrial Park. In my opinion, that's where a crematory should be located, in an industrial park, because any odors and any

emissions coming through most likely will not have an opportunity to harm children ... [and] families....[I]n my opinion, there's a reason that [a] crematory is allowed in the industrial park. And I know I can't by fiat simply say that's where they all should be. But it certainly is my opinion about where they should be, because I think they pose a danger. And given the existence of that one crematory ... that already exists in Beltsville, I look at it as a weighing factor.

If there's one already there, we has no evidence to suggest that the one that is there is not sufficient, both in terms of quality and in terms of volume, to take care of whatever need there may be. And if that's the case, then I look at the potential harm on one side and the lack of need on the other. And when I see that balancing act, then the potential harm outweighs the whole need issue, because there's no evidence that there is a need.... [I]f there's no need and there is potential harm, then we should not approve the use.... [I understand that the ordinance does not require an analysis of need.] I raised it ... because it seemed to me a logical factor when considering the health, safety, and welfare of the general neighborhood and employees and residents of the neighborhood.... [I] there's no need to bring that potential noxious use into the neighborhood, and there is a potential danger in doing so, then to me, that says that the health, safety and welfare of the employees and residents in the neighborhood is not going to be well served by the existence of this use....

(T. 92-98)

Agency Comments

(25) In reviewing air-quality permit request to operate a crematory at Evans Funeral Home in Harford County, Maryland,³ the Maryland Department of the Environment ("MDE") addressed the community's concerns about elements emitted from the cremains, and the impact on air quality:

A permit to construct is required before construction or modification of a crematory. COMAR 26.11.02.02. When evaluating whether to issue a Permit to Construct, the Department uses available data to determine whether a proposed source will violate state and federal air pollutant standards. Proposed projects are evaluated based on their maximum capacity to emit air pollutants under its physical and operational design, also known as their "potential to emit."

The Department uses emissions factors to estimate emissions from air pollution sources. Emissions factors are established using data developed from the average or the worst-case emission levels measured at an operating facility. The use of emissions factors is a widely accepted practice to establish a reference point for the expected quantity of

³ This Funeral Home uses Matthews Cremation Equipment. (Exhibit 33, Backup pp. 39-43)

emissions from a proposed source of air pollution and to use those estimates to determine whether the source will comply with applicable air quality standards.

In 1999, EPA conducted extensive stack emissions testing of a crematory unit for the purpose of developing emissions factors for human crematories. Since then, these emissions factors have been used throughout the United States as the basis for estimating emissions from human crematories.

To ensure that the EPA crematory emission factors were still the most conservative estimates, upon request of several member states including Maryland, the Mid-Atlantic Regional Air Management Association (MARAMA), an association of state and local air agencies, formed a crematory workgroup in October 2023 to assist member agencies. MARAMA member agencies include Maryland, Delaware, the District of Columbia, New Jersey, North Carolina, Pennsylvania, Virginia, West Virginia, and Philadelphia and Allegheny County, Pennsylvania. The workgroup meets monthly and is in the process of developing a best practices document for the permitting and enforcement of human and animal crematories based on the input received from member agencies and other states, such as California and Massachusetts, who also participate in the workgroup.

The Department's strategy for estimating emissions from the proposed human crematory was to use the worst-case known data currently available for all pollutants, as this represents the maximum amount of a given pollutant that we would expect to be emitted.

After reviewing data from the workgroup, the Department has determined that the EPA emissions factors are still the most conservative estimates (higher emission factors expected to be more protective of public health) when compared to actual stack emissions test data conducted in recent years in other states for emissions of sulfur dioxide, volatile organic compounds, and carbon monoxide.

However, for emissions of particulate matter, the Department reviewed recent reported data in the EPA's 2020 National Emissions Inventory Technical Support Document for Cremation to establish a more conservative emissions factor than what was previously used based on the 1999 EPA emissions factors. This document was also used to establish more conservative emissions factors for the following toxic air pollutants: acenaphthylene, arsenic, benzo (g,h,i) perylene, cadmium, chromium (VI), cobalt, hydrogen chloride, and naphthalene.

For emissions of acetaldehyde, formaldehyde, and mercury, the Department found that the worst-case data from California's Bay Area Air Quality Management District's permit manual for cremation was more conservative than the 1999 EPA emissions factors and have therefore adopted these. Due to mercury's high level of toxicity, mercury has the most potential for impact to public health, and therefore the most stringent toxicity exposure level, of all the pollutants emitted from a human crematory. The California Bay Area emissions factor to estimate mercury emissions is 0.005 pounds per cremation, which is higher than what Maryland previously used based on EPA's emissions factor (0.003 pounds per cremation). Using the higher emissions factor results in a higher projected mercury emissions rate. For review purposes, using the higher emissions factor provides a more conservative picture of emissions, which is more protective of public health.

This emissions rate coupled with the stringent exposure level for mercury required by Maryland's toxic air pollutant regulations, limits Evans Funeral Chapel and Cremation Services – White Marsh, P.A. to no more than two cremations in an 8-hour period.

Since mercury has the most stringent exposure level, using mercury emissions to limit the operation of the crematory significantly reduces emissions of all other toxic air pollutants well below their established exposure levels....

A well-operated and maintained human crematory should not result in a violation of any applicable air quality standard. There are several measures in place in the permit to ensure that the crematory is properly operated and maintained to achieve complete combustion and is equipped with appropriate emissions control and monitoring systems.... [T]he permit requires Evans Funeral Chapel and Cremation Services – White Marsh, P.A. to develop and maintain an Operations and Maintenance Plan that is approved by the Department.

First, the permit requires that the crematory 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 °F as recommended by the manufacturer. At a temperature of at least 1600 °F, gases from the primary cremation chamber achieve complete combustion, thereby reducing the potential for pollutants to be discharged to the atmosphere. Therefore, even though it is not labeled as such in the permit application, a secondary combustion chamber is an emissions control device. The permit not only requires a minimum temperature of at least 1600 °F, the permit requires that the temperature be continuously monitored and recorded, and a cremation cannot be initiated unless the secondary chamber temperature reaches that temperature. As a condition of the Permit to Construct, the Department will receive and review the temperature data to ensure that the secondary combustion chamber is operating as required.

Second, the permit requires that the crematory be equipped with an opacity sensor that is interlocked with a control system that continuously monitors the stack gases for visible emissions and adjusts cremation operations to prevent visible emissions from exiting the crematory stack. Although the control system is designed to make adjustments automatically to prevent visible emissions, such as adjusting the air flow or gas mixture to promote complete combustion, the crematory vendor can also make adjustments remotely or instruct the facility operator locally to make adjustments as needed.

Third, the permit requires the stack height of the crematory stack to be at least 37 feet above ground. At this height, based on the Department's evaluation of the impact of toxic air pollutants from the crematory, the exhaust gases from the stack will be properly dispersed to prevent downwash or heavy concentrations of pollutants at or near the facility and neighboring area.

Fourth, the permit requires initial opacity testing and actual or representative stack emissions testing for particulate matter and metal emissions. The use of stack emissions testing results from similar or identical units or processes is a widely accepted practice used by industry and federal and state environmental agencies to establish a frame of reference for the quantity, nature, and range of emissions from a certain source category, such as from human cremation.

Fifth, the permit restricts what can be processed in the human crematory, limiting cremations to only two in any 8-hour period.

Finally, the permit requires Evans Funeral Chapel and Cremation Services-White Marsh, P.A. to develop and maintain an Operations and Maintenance Plan that is approved by the Department. The plan would include provisions for the operator to ensure that the crematory is properly operated and maintained and if there are process upsets, what corrective actions would be required.

These measures are sufficiently stringent to ensure complete combustion and proper operation and maintenance. Additional emissions controls or monitors such as scrubbers or carbon monoxide monitors are not necessary to demonstrate compliance with applicable air quality standards....

The Department has evaluated the air quality impacts associated with the equipment presented in the application for a permit for the construction of an air pollution source at the location selected by the applicant. The Department has no authority to require an applicant to locate their project at an alternative location. MDE can only conduct a review of the pollutants emitted from the chosen facility at the chosen location and make a determination on whether they meet air quality standards, do not adversely impact public health, and will not create a nuisance. If the determination is that there are no negative findings regarding these three areas of consideration, using the evaluation tools and methodologies available to the Department (see more below), a decision will be made to issue a permit....

As part of its evaluation of the application, the Department reviews technical information contained in both the application and the Department's files and in published reference materials. A determination is then made as to whether the estimated emissions from the equipment under review will or will not cause or create:

1. A violation of any of the National Ambient Air Quality Standards (for federal criteria pollutants) or regulatory requirements associated with those standards.
2. An adverse effect on public health (for toxic air pollutants).
3. A nuisance.

Cumulative impacts for criteria pollutants are taken into account indirectly in that the emissions from all existing sources are reflected in the pollutant concentrations measured by ambient air quality monitors located around the State. From a permit review standpoint, the monitored value for a criteria pollutant is considered to be a background level (more detail regarding this is provided in the next paragraph). If an existing source or a collection of existing sources has an adverse impact on air quality, it would be reflected in the monitoring data. Cumulative impacts associated with toxic air pollutants are indirectly considered in the setting of the standard: the regulatory standards established for toxic air pollutants were set conservatively (1/100th of the worker safety level) to, among other things, account for the presence of multiple sources.

For criteria pollutants, the Department reviews modeling information (or conducts its own modeling exercise) and determines the maximum ambient pollutant concentration the equipment is expected to generate. This maximum concentration is then added to the background (monitored) concentration. to determine an overall estimated impact. If the overall impact is estimated to be below the federal ambient air quality standard, the determination is that the equipment will not adversely impact air quality.

For toxic air pollutants, the Department reviews modeling information to determine whether the maximum ground-level concentration is below conservative (more protective of public health) standards established by the Department. If the modeling determines that the maximum concentration is below the standards, the Department's conclusion is that the equipment will not harm public health.

For Evans Funeral Chapel and Cremation Services - White Marsh, P.A., the conclusion reached by the Department is that the emissions from the proposed human crematory would not cause a violation of any ambient air quality standard and the maximum concentration of any toxic air pollutant would be below any threshold that the Department considers injurious to public health.

As required by Maryland law, the applicant provided an Environmental Justice (EJ) Score Report with their permit application submitted in February 2023. The EJ Score in the census tract where the facility will be located, expressed as a statewide percentile, was shown to be 41, which the Department verified. 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....

The Department's review process considers broad health impacts rather than health impacts based on specific health conditions. That is the situation for every permit application reviewed, from crematories to large industrial facilities to power plants. Part of our permit review process considers whether a facility will meet federal ambient air quality standards.

The EPA develops National Ambient Air Quality Standards (NAAQS) for six criteria pollutants to set standards that protect public health with an adequate margin for safety. These standards are developed by health experts, to ensure that the standards are sufficient to protect public health.

For federal non-criteria pollutants (188 hazardous air pollutants at the federal level) the EPA establishes technology standards that apply to various operations. These standards result in the installation of pollution control technologies that minimize the amount of pollution allowed. Although there are no federal technology standards for crematories, technology controls are addressed within the Maryland permitting arena and health impacts are addressed indirectly_

Maryland identifies thousands of toxic air pollutants. To regulate toxic air emissions, Maryland requires sources to comply with Toxic-based Best Available Control Technology (TBACT). For crematories, TBACT requires that crematories be equipped with a secondary chamber capable of achieving a minimum residence time and combustion zone temperature. Following the use of TBACT, a crematory must ensure that the after-control level of emissions of any toxic air pollutant will not endanger public health. This is done by comparing the modeled concentration of a particular toxic air

pollutant at the worst-case ground level point beyond the property line to a concentration set by the American Conference of Governmental Industrial Hygienists for that same pollutant. That organization sets their concentration at a level to protect workers in an industrial setting to which those workers are exposed to the pollutant in question daily over an eight-hour period. Under the Maryland permitting system, the Department takes that concentration and divides it by a factor of 100 so that it is more protective of public health. For all crematory toxic air pollutants, including mercury, the expected emissions from the proposed crematory will not exceed the short-term exposure limits established for each pollutant that are protective of public health.

For certain known carcinogenic pollutants, an additional annual concentration standard is set by the EPA based on cancer risk. The concentration standard is set at a level where if 100,000 people were exposed to the estimated concentration of that pollutant in the atmosphere for 70 consecutive years, one person would be expected to develop cancer. For all crematory-related toxic air pollutants, the expected emissions from the proposed crematory will not exceed the annual exposure limits established for each pollutant that are protective of public health

With regard to metals recycling of implants or other metal devices, non-battery operated medical implants or devices that are not explicitly required to be removed by MOH regulation may be in the human remains that are processed by the human crematory. During the cremation process, water, soft tissues, and the cremation container are burned. In addition to bone fragments, any metal implants and devices capable of withstanding the heat remain intact in the primary chamber and are not emitted as particles to the atmosphere...

Following the initial start-up of the human crematory, Evans Funeral Chapel and Cremation Services - White Marsh, P.A. is required to demonstrate initial compliance with all applicable air quality standards and apply for and obtain an air quality State Permit to Operate from the Department. To demonstrate initial compliance, the facility is required to use an independent third-party to conduct opacity tests, in accordance with EPA Method 9 testing requirements. Upon notification of final installation, post-construction inspections by the Air Quality Compliance Program will be conducted to ensure that the crematory was installed in accordance with the requirements of the air quality permit to construct. Air Quality Compliance Program staff are certified to conduct Method 9 opacity tests to verify on-going compliance following the initial third-party test. Following the issuance of a State Permit to Operate, the Air Quality Compliance Program will conduct a full compliance inspection to ensure that a source is not operating in violation of air quality regulations or permit conditions. These inspections generally include visible emissions observations by certified MOE staff and an odor survey. Records and logbooks on source operations, including continuous temperature monitoring records, maintenance records, and actions taken as required by the permit, are also reviewed. In addition to full compliance inspections, unannounced inspections are conducted at irregular intervals.

The facility is also required to certify all air pollution emissions annually and pay an emissions-based annual fee to the Department. Should a violation of any provision of a permit or a direct regulatory requirement occur, the Department has adequate legal authority to compel a facility to take the necessary measures to address the violation and bring the operation back into compliance. ...

A well-operated and maintained human crematory should not be a source of odors. The secondary combustion chamber is designed to fully combust all remaining gases, eliminating the emission odors. MDE reviewed its records for the last several years and found no record of an odor complaint associated with a crematory. The permit requires Evans Funeral Chapel and Cremation Services - White Marsh, P.A. to develop and maintain an Operations and Maintenance (O&M) Plan that must be reviewed and approved by the Department. The plan must include procedures that ensure proper operation and maintenance of the crematory. In the unlikely event this crematory causes odors, as noted earlier, the Department has adequate legal authority to compel compliance....

(Exhibit 46, Item 2)

(26) The Prince George's County Planning Department's (the "Planning Department") Environmental Planning Section issued a Standard Exemption Letter (NRI-075-2024) exempting the Application from the Woodland and Wildlife Habitat Conservation Ordinance because the Subject Property contains less than 10,000 square feet of woodland; there is no previously issued Tree Conservation Plan for the site; and, there are no on-site regulated environmental features. (Exhibit 33, Backup pp. 52-53) The Environmental Planning Section reviewed applicable provisions of the 2014 General Plan and the 2010 Master Plan and did not find substantial impairment of either primarily because there is no development proposed within the Green Infrastructure Network discussed within the 2017 Countywide Green Infrastructure Plan set forth within the 2017 Resource Conservation Plan, there is no floodplain on site, and the request is exempt from stormwater management requirements due to the limits of disturbance being less than 5,000 square feet and will not adversely affect water quality, (Exhibit 33, Backup pp. 64-67) It provided the following comments in closing:

Section 27-317(a)(7) of the Zoning Ordinance states that the [Zoning Hearing Examiner] may approve a SE if it finds that the regulated environmental features have been preserved and/or restored in a natural state to the fullest extent possible.... The site does not contain REF....

In accordance with Section 27-317 (a)(5) and (7), an approved Concept Plan (#41723-2024-SDC) was submitted with the application and shows that this project is exempt from stormwater management requirements because less than 5,00 square feet will be disturbed....

According to the U.S. Department of Agriculture ... Natural Resource Conservation Service Web Soil Survey, soils present include Sassafras-Urban land complex. According to available mapping information, unsafe soils containing Marlboro clay or Christiana complexes do not occur on this site. There are no geotechnical concerns with this application....

Development shall comply with the requirements for sedimentation and erosion control in accordance with Subtitle 32, Division 2 ... of the Prince George's County Code. The County requires the approval of an Erosion and Sediment Control Plan....

(Exhibit 33, Backup p. 68)

(27) The Planning Department's Community Planning Division opined that the request would not substantially impair the integrity of the 2010 Master Plan nor adversely affect the health, safety, or welfare of residents or workers in the area, and would satisfy the additional requirements for the use set forth in Section 27-357, for the following reasons:

The 2014 Plan Prince George's 2035 Approved General Plan (Plan 2035) places the application in the Established Communities. Plan 2035 states that, "Established communities are most appropriate for context-sensitive infill and low-to-medium density development. Plan 2035 recommends maintaining and enhancing existing public services (police and fire/EMA), public facilities (such as libraries, schools, parks, and open space), and infrastructure in these areas (such as sidewalks) to ensure that the needs of existing residents are met." (p. 20)

Analysis: Community Planning staff find the proposed application for Special Exception demonstrates a context-sensitive development, improvements to needed infrastructure, and the expansion or intensification of a critical public service to meet the needs of community residents....

The master plan recommends a **Low-Density Residential** land use on the subject property (Map 12, Approved Future Land Use for Subregion 1, p. 160).

The master plan does not provide a definition for Low Density Residential land uses. The 2014 Plan Prince George's 2035 Approved General Plan (Plan 2035) describes Low Density Residential land uses as "Residential areas up to 3.5 dwelling units per acre. Primarily single-family detached dwellings." (Table 14, Generalized Future Land Use Categories, p. 100).

The proposed onsite crematorium and expansion of mortuary services conforms to the master plan recommended future land use because a Funeral parlor or undertaking establishment is an allowed use under the Rural Residential (R-R) base zone, subject to the approval of a Special Exception, pursuant to Section 27-441, Uses Permitted. On October 1, 1981 - SE-3267 was recommended for approval for the Funeral Home and its associated parking. This prior Special Exception provides additional support for conformance to the master plan recommended future land use.

Economic Development

"Policy 1: Maintain and enhance the flex and industrial base of the master plan area to provide a stable job base, while improving compatibility with surrounding land uses.

Strategies

- Emphasize improved performance standards for minimizing noise and air pollution impacts, particularly for industrial users near residential areas." (p. 78)

Analysis: The applicant has provided substantial technical and model-specific information regarding the crematorium. The applicant has provided a list of other Funeral Homes utilizing the specific crematorium product; Matthews' Environmental Solutions Cremation Equipment. Many of the examples on the list are in similar residential contexts to the proposed application and demonstrates that the addition of the crematorium will be sensitive to environmental considerations with regards to energy

consumption, but also to the health and safety of the surrounding neighborhoods as the crematorium is being used.

The master plan places the property in the Beltsville living area. There are specific goals, policies, and strategies applicable to the Beltsville living area, and the subject property.

Beltsville Living Area

"Policy: Repair and Maintain Roads

Strategies

- Install streetscape improvements to include paved, pedestrian paths and safety features, lighting where needed, trees/landscaping, and curbs along Powder Mill Road from Gunpowder Road to US 1, Montgomery Road, Sellman Road, and US 1." (p. 114)

Analysis: The applicant has committed to providing pedestrian improvements on site and at the curb cuts at the driveway entrances to the subject property from Powder Mill Road. These pedestrian improvements include two crosswalks; the first located to the southeast portion of the subject property along powder mill road, and the second located north along Powder Mill Road. As there are two curb cuts leading into the subject property, these crosswalks will be critical to ensuring the safety of pedestrians along Powder Mill Road....

(Exhibit 33, Backup pp.71-72)

(28) The Planning Department's Subdivision Division provided the following comment:

The property subject to this special exception... is known as Part of Parcel 42, described in a deed recorded in the Prince George's County Land Records in Book 6210 page 566 dated 1985. The approximately 1.74- acre property is located in Tax Map 12, Grid F3.... The application was accepted for review on March 31, 2025.... This memo is based upon a submittal received on March 26, 2025....

There is no prior preliminary plan of subdivision (PPS) applicable to the property. The property is currently developed with [an] 8,101 square foot funeral home constructed in 1985, pursuant to prior special exception approvals.... [A] 3000 square foot office space and 1,400 square foot garage [were] approved on the property [in 1990].... However, the garage was not constructed, and a 3,101 square foot addition was constructed after January 1, 1990.

The total development proposed for the property does not exceed 5000 square feet of gross floor area. Per... the prior Subdivision Regulations, development of a property subdivided by deed prior to January 1, 1982, is restricted to a single-family detached dwelling, or 5000 square feet of gross floor area. The applicant proposes a second addition of 1,664 square feet on the property. The gross floor area (GFA) added after January 1, 1990, will be ... 4,765 square feet of GFA, which is less than 5000 square feet. Therefore, the proposed development is exempt from the requirement of filing a preliminary plan and final plat of subdivision. Any future development on the property may be ... [required to file] a PPS and final plat.

(Exhibit 33, Backup p. 59)

(29) The Planning Department's Transportation Planning Section noted that the request is subject to the 2009 Master Plan of Transportation and the 2010 Subregion I Master Plan, and provided the following comment:

The subject application proposes an addition to the existing funeral building for crematory use. the property fronts Powder Mill Road, which is a master planned collector roadway, [and] the plans are to be revised to delineate the ROW. The site is currently improved with existing sidewalk and a striped bicycle lane along the frontage of Powder Mill Road, meeting the intent of the master planned bicycle and pedestrian facilities. The recommended marked crosswalks at the driveway entrances are conditioned to be shown on the site plan. The site also exceeds the minimum required parking and loading. Staff find the subject application does not impair the integrity of the approved Master Plans....(Exhibit 33, Backup p. 62)

(30) The Planning Department's Historic Preservation Section stated that none of the Master Plan's goals and policies related to historic preservation are specific to the Subject Property or the proposed development, and opined as follows:

The subject property was included in the 1980 preliminary archeological assessment of the Inter-County Connector alignment...[and] no archeological sites were identified. There are no Prince George's County Historic Sites or resources on or adjacent to the subject property. Historic Preservation staff recommends the approval of SE-4848....

(Exhibit 33, Backup p. 69)

(31) The Technical Staff ultimately recommended approval of the request with conditions, addressed below.

LAW APPLICABLE

(1) A Funeral Home and Crematory are permitted as a Special Exception in the R-R Zone by Section 27-441 in accordance with Sections 27-317, Section 27-341, and Section 27-357 of the Zoning Ordinance.

(2) Section 27-317 provides:

(a) A Special Exception may be approved if:

- (1) The proposed use and site plan are in harmony with the purpose of this Subtitle;
- (2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;
- (3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or, in the absence of a Master Plan or Functional Master Plan, the General Plan;
- (4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;

- (5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and
 - (6) The proposed site plan is in conformance with an approved Type 2 Tree Conservation Plan; and
 - (7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5).
- (b) In addition to the above required findings, in a Chesapeake Bay Critical Area Overlay Zone, a Special Exception shall not be granted:
- (1) where the existing lot coverage in the CBCA exceeds that allowed by this Subtitle, or
 - (2) where granting the Special Exception would result in a net increase in the existing lot coverage in the CBCA.
- (3) Section 27-341(a)(1) states:

A cemetery (including an animal cemetery) or a crematory may be permitted, provided that the use shall not be located within any proposed street or other public right-of-way, notwithstanding Section 27-259.

- (4) Section 27-357 (a) provides as follows:
- (1) A funeral parlor or undertaking establishment may be permitted subject to the following:
The minimum side and rear yard setbacks shall be at least fifty (50) feet each, when adjoining land in any Residential Zone, or land proposed to be used for residential purposes on an approved Basic Plan for a Comprehensive Design Zone, approved Official Plan for an R-P-C Zone, or any approved Conceptual or Detailed Site Plan;
 - (2) If the subject property is located in a Residential Zone, it shall contain at least one and one-half (1 1/2) contiguous acres;
 - (3) The use shall not depreciate the value of neighboring properties;
 - (4) The use shall not adversely affect the character of neighboring properties; and
 - (5) The use shall not create undue traffic congestion.

Burden of Proof

(5) The Court of Appeals of Maryland has frequently expressed the applicable standards for judicial review of the grant or denial of a Special Exception use. The Special Exception use is a part of the comprehensive zoning plan sharing the presumption that, as such, it is in the interest of the general welfare, and therefore, valid. The Special Exception use is a valid zoning mechanism that delegates to an administrative board a limited authority to allow enumerated uses which the legislature has determined to be permissible absent any fact or circumstance negating this presumption. The duties given the Board are to judge whether the neighboring properties in the general neighborhood would be adversely affected and whether the use in the particular case is in harmony with the general purpose and intent of the Plan.

The Applicant has the burden of adducing testimony which will show that his use meets the prescribed standards and requirements, he does not have the burden of establishing affirmatively that his proposed use would be a benefit to the community. If he shows to the satisfaction of the Board that the proposed use would be conducted without real detriment to the neighborhood and would not actually adversely affect the public interest, he has met his burden. The extent of any harm or disturbance to the neighboring area and uses is, of course, material. If the evidence makes the question of harm or disturbance or the question of the disruption of the harmony of the comprehensive plan of zoning fairly debatable, the matter is one for the Board to decide. But if there is no probative evidence of harm or disturbance in light of the nature of the zone involved or of factors causing disharmony to the operation of the comprehensive plan, a denial of an application for a Special Exception use is arbitrary, capricious, and illegal. Turner v. Hammond, 270 Md. 41, 54-55, 310 A.2d 543, 550-51 (1973); Rockville Fuel & Feed Co. v. Board of Appeals of Gaithersburg, 257 Md. 183, 187-88, 262 A.2d 499, 502 (1970); Montgomery County v. Merlands Club, Inc., 202 Md. 279, 287, 96 A.2d 261, 264 (1953); Anderson v. Sawyer, 23 Md. App. 612, 617, 329 A.2d 716, 720 (1974). These standards dictate that if a requested Special Exception use is properly determined to have an adverse effect upon neighboring properties in the general area, it must be denied. Schultz v. Pritts, 291 Md. 1, 432 A.2d 1319, 1325 (1981). See also Mossberg V. Montgomery County, 107 Md. App. 1, 666 A.2d 1253 (1995).

(6) The appropriate standard to be used in determining whether a requested Special Exception use would have an adverse effect and, therefore, should be denied is whether there are facts and circumstances that show that the particular use proposed and the particular location proposed would have any adverse effects above and beyond those inherently associated with such a Special Exception use irrespective of its location within the zone. Turner v. Hammond, 270 Md. 41, 54-55, 310 A.2d 543, 550-51 (1973); Deen v. Baltimore Gas & Electric Co., 240 Md. 317, 330-31; 214 A.2d 146, 153 (1965); Anderson v. Sawyer, 23 Md. App. 612, 617-18, 329 A.2d 716, 720, 724 (1974). Schultz v. Pritts, 291 Md. 1, 432 A.2d 1319, 1331 (1981). See also Mossberg v. Montgomery County, 107 Md. App. 1, 666 A.2d 1253 (1995).

CONCLUSIONS OF LAW

(1) The general purposes of the Zoning Ordinance are listed in §27-102(a), and Special Exception 4848 is in harmony with these purposes:

- (1) *To protect and promote the health, safety, morals, comfort, convenience and welfare of the present and future inhabitants of the County;*

This proposal will enable the Applicant to provide a Crematory to better serve those seeking funeral services, thereby promoting the comfort and convenience of the County's inhabitants.

- (2) *To implement the General Plan, Area Master Plans, and Functional Master Plans;*

The General Plan encourages this context-sensitive infill development on a site currently improved with a Funeral Home. The Master Plan's policy of having new development be compatible with the current character of the neighborhood is furthered as the addition is relatively small, its designs and materials match those of the Funeral Home and complement the surrounding development, and its chimney stacks will be relatively hidden from surrounding development. Policies within other Functional Master Plans are furthered as fully discussed in Mr. Ferguson's Land Planning Analysis and the Technical Staff Report. (Exhibits 33 and 44)

- (3) *To promote the conservation, creation and expansion of communities that will be developed with adequate public facilities and services;*

The Applicant is proposing the addition of a 1,664-square-foot Crematory to an existing Funeral Home that has operated on the site for many years. The expansion is so small that a new preliminary plan of subdivision is not required. Accordingly, this purpose is met.

- (4) *To guide the orderly growth and development of the County, while recognizing the needs of agriculture, housing, industry and business;*

This proposal will allow this established Funeral Home to add its own crematory on site, and not continue to outsource requests for cremation, and the new use will only be 1,664 square feet. This will both recognize the needs of the industry and allow orderly growth on the site.

- (5) *To provide for adequate light, air, and privacy;*

Adequate natural light, air and privacy will be maintained on this fairly large site since the relatively small Crematory will not diminish the setbacks between the subject property and neighboring properties and meets height limitations.

- (6) *To promote the most beneficial relationship between the uses of land and buildings and protect landowners from the adverse impacts of adjoining development;*

This proposal will not alter the established beneficial relationship between land uses, as it is for the granting of a Special Exception to permit a small addition to a developed site and conforms with the provisions of the County Code, in general, and the Zoning Ordinance, specifically.

- (7) *To protect the County from fire, flood, panic and other dangers;*

This proposal will not result in the creation of a dangerous situation as the new Crematory addition will meet all applicable safety regulations of the County, State and Federal governments via the permit review process.

- (8) *To provide sound, sanitary housing in a suitable and healthy living environment within the economic reach of all County residents;*

As this proposal is for the granting of a Special Exception to permit the addition of a Crematory, this purpose does not apply.

- (9) *To encourage economic development activities that provide desirable employment and a broad, protected tax base;*

This proposal will continue provide employment opportunities in harmony with this purpose.

- (10) *To prevent overcrowding of the land;*

This proposal will not overcrowd the land as it brings the total lot coverage to 58 percent, less than the maximum 60 percent permitted.

- (11) *To lessen the danger and congestion of traffic on the streets, and to insure the continued usefulness of all elements of the transportation system for their planned functions;*

The granting of the proposed Special Exception will neither alter the relationship of the existing Funeral Home use to the streets, nor change that use.

- (12) *To [ensure] the social and economic stability of all parts of the County;*

This proposal is to allow the existing Funeral Home to modernize its facilities by adding a crematory in conformance with the requirements of the Zoning Ordinance.

- (13) *To protect against undue noise, and air and water pollution, and to encourage the preservation of valleys, steep slopes, lands of natural beauty, dense forests, scenic vistas and other similar features;*

The use will have no substantial impact to the natural features in the County as it will be located on a developed site without regulated environmental features; the requisite air quality permit must be obtained from MDE before the Crematory can be constructed thereby reducing the possibility of air pollution; and it is exempt from the County's woodland conservation policies due to its lack of impact upon existing woodlands.

- (14) *To provide open space to protect scenic beauty and natural features of the County, as well as provide recreational space; and*

(15) *To protect and conserve the agricultural industry and natural resources.*

This proposal is an infill development that will continue the use of the subject property as a Funeral Home and add a relatively small Crematory. These two purposes are not directly applicable, but this small addition will be infill development and will not detract from the scenic beauty or natural features of the County, nor its natural resources or agricultural industry.

The specific purposes of the R-R Zone listed in Section 27-428(a)(1) are:

- (A) To provide for and encourage variation in the size, shape, and width of one-family detached residential subdivision lots, in order to better utilize the natural terrain;
- (B) To facilitate the planning of one-family residential developments with moderately large lots and dwellings of various sizes and styles;
- (C) To encourage the preservation of trees and open spaces; and
- (D) To prevent soil erosion and stream valley flooding.

The request is in harmony with these purposes because there will be very little disturbance on the site, thereby preserving trees, and preventing any soil erosion or stream valley flooding.

(Section 27-317(a)(1))

(3) No variances or departures are required as all bulk regulations are met. (Section 27-317(a)(2))

(4) The proposed Crematory and continued operation of the existing Funeral Home will not impair the integrity of the approved Master Plan for Subregion 1 and the applicable Functional Master Plans, for the reasons noted above. (Section 27-317(a)(3)).

(5) No evidence is in the record which would support a conclusion that the proposed Crematory and continued operation of the existing Funeral Home would either adversely affect the health, safety or welfare of residents or workers in the area or that it would be detrimental to the use or development of adjacent properties or the general neighborhood, once the conditions, *infra*, are met. Again, the Funeral Home is not being changed. The prior Examiner and District Council found that it did not depreciate the value of neighboring properties, nor adversely impact the neighborhood. It has successfully operated on the site for decades. And the prior approval for that use should remain in effect.

The Opposition are not opposed to the continued operation of the Funeral Home, describing it as a good neighbor all of these years. However, they were rightfully concerned with the emissions generated by Crematories. However, Matthews is contracted to provide the equipment and services for Applicant. The information provided

concerning MDE's review of an Air Quality Permit request by a Crematory that planned to use Matthews equipment shows the stringent standards required for Crematories by the State and the federal government should assuage concerns because the instant request will have to undergo the same stringent vetting, and a condition to that effect is addressed below.

Since the District Council permits this use, subject to Special Exception approval, and since a condition of such approval is that the MDE has an opportunity to vet the use and issue the Air Quality Permit, there is nothing in the record to indicate any adverse impact on the surrounding properties in the former R-R Zone other than those usually generated by this type of use will occur. (Sections 27-317(a)(4) and (5))

(6) The subject property is exempt from the Prince George's County Woodland Conservation and Tree Preservation Ordinance, as noted above. (Section 27-317(a)(6))

(7) There are no regulated environmental features on the site. (Section 27-317(a)(7))

(8) The subject property does not lie within the Chesapeake Bay Critical Area Overlay Zone. (Section 27-317(b))

(9) The Funeral Home and Crematory are set back more than fifty feet from adjoining land in a residential zone on all sides; the property contains 1.74 acres; the Funeral Home has been found not to depreciate the value of neighboring properties; it has similarly been found not to adversely affect the character of neighboring properties; and the addition of the Crematory will arguable reduce the traffic that comes to the site so the prior finding that the Funeral Home use not create undue traffic congestion should stand. (Section 27-357(a)(1)-(5))

(10) No portion of the site lies within any proposed street or public right-of-way. (Section 27-341(a)(1))

DISPOSITION

Special Exception 4848 for a Funeral Parlor and Crematory is APPROVED, subject to the following conditions:

1. Prior to certification of the special exception site plan, the following revisions shall be made:

a. Revise "Zone 1" of the Tree Canopy Coverage schedule to reflect the current Residential, Rural (RR) Zone, instead of the R-R (Rural Residential) Zone.

b. Provide a landscape schedule in accordance with Section 4.9, Sustainable Landscaping requirements, of the 2010 Prince George's County Landscape Manual, on the plans demonstrating proposed plant materials will be in conformance with the sustainable landscape requirements.

- c. Provide the width of the lot at the building line and street line on the special exception site plan.
 - d. Provide the required and proposed lot coverage on the special exception site plan and demonstrate the site does not exceed the maximum requirement.
 - e. Update the landscape plan to reflect the requirements of Alternative Compliance AC-95015, and to reflect existing and proposed plant materials on-site.
 - f. Add a note to the site plan indicating that the chimney height shall be consistent with the requirements of an approved Air Quality Permit to Construct issued by the Maryland Department of the Environment.
 - g. A Note shall be added to state that the queuing of all processional vehicles, must occur within the parking area on-site.
 - h. A Note shall be added to state that weekday funeral processions be limited between the hours of 10:00 a.m. and 4:00 p.m. to avoid peak traffic hours, and that Crematory operations shall be between the hours of 8:00 a.m to 6:00 p.m.
2. Prior to issuance of a building permit for the crematory facility, the Applicant shall provide a copy of an approved Air Quality Permit to Construct issued by the Maryland Department of the Environment.

[Note: The Special Exception Site and Landscape Plan is Exhibit 45]