



VILLAGE OF WINNEBAGO

ZONING BOARD MEETING AGENDA

Monday, July 22, 2024 at 6:00 PM

108 West Main Street and Virtually

To access meeting from any device: <https://global.gotomeeting.com/join/777725485>

Or by (Toll Free): 1 877 309 2073 | Access Code: 777-725-485

1. CALL TO ORDER
2. ROLL CALL
3. DISCLOSURE OF ANY CONFLICT OF INTEREST
4. PUBLIC COMMENT

It is recommended that a written request to address the Village Board by non-members should be submitted via mail, hand delivery, or the Village Website to the Village of Winnebago Office located at 108 West Main Street, Winnebago, Illinois, 61088, by 12:00 Noon on the day of the meeting scheduled by the Village authorities in which the speaker would like to participate. Alternatively, speakers may fill out the form at the meeting to sign up for public comment. Each speaker is limited to three (3) minutes. A maximum of thirty (30) minutes shall be allowed for public comment at each meeting.

5. APPROVAL OF MINUTES

[a.](#) Minutes from June 3, 2024

6. DISCUSSION

[Zoning](#) Text Amendment- Crematories

7. NEW BUSINESS
8. EXECUTIVE SESSION
9. ADJOURNMENT

Posted: July 17, 2024 at 2:15 p.m. at 108 W. Main Street, Winnebago, IL

and online at www.villageofwinnebago.com Tel 815.335.2020 | Fax 815.415-8491

/s/ Rachel Windgassen, Admin Assistant



VILLAGE OF WINNEBAGO

ZONING BOARD MEETING MINUTES

Monday, June 03, 2024 at 6:00 PM
108 West Main Street and Virtually

1. CALL TO ORDER

The meeting was called to order at 6:00 p.m.

2. ROLL CALL

PRESENT: Chairman Bill Emmert, Irv Koning, Riley Pitney

Guests: Attorney Mary Gaziano, Village Administrator Joseph Dienberg, Scott Olson of Olson Funeral and Cremation Services.

3. DISCLOSURE OF ANY CONFLICT OF INTEREST

No conflict of interest was noted.

4. PUBLIC COMMENT

Mr. Olson had the opportunity provide public input on the item for discussion.

5. APPROVAL OF MINUTES

a. Minutes from September 25, 2023

Chairman Emmert made the motion to discuss the minutes from September 25, 2023 at the next meeting, since he was not able to review the minutes prior, Mr. Koning seconded the motion. Motion carried on a unanimous voice vote of those present.

6. DISCUSSION

a. Request by Olson Funeral Home to Operate a Crematory

Chairman Emmert stated that the reason for the meeting was by request of Olson Funeral Home and Crematory and the regularly scheduled Zoning Board Meeting was on Memorial Day. Chairman Emmert gave Mr. Olson opportunity to explain their plans for the former Genandt Funeral Home. Mr. Olson stated that they recently purchased the current funeral home which has a secondary structure on the property that would be an ideal place for a crematory. He has spoke with Sjostrom Construction who has provided an assessment of the structure and what would be needed for the purpose of

a crematory. Mr. Olson addressed some of the most common questions asked regarding a crematory such as: Will there be smoke and odor? He stated that it is a state-of-the-art machine. Under normal operating conditions there will not be any smoke or odor. Is the equipment environmentally safe? Yes. The emission levels are well below permissible levels. Will the facility be operating 24/7? It will not. It's estimated to be operating at most 10 hours a day. Will it be loud? It will not. The noise emitted is similar to an air conditioner running.

Chairman Emmert explained the reason for the special meeting and suggested making a recommendation to include Funeral Home in the General Business District. Chairman Emmert suggested have a public hearing to address the proposed options: permitted use of the funeral home and special permitted use of the crematory. Mr. Koning stated that he agreed to clarify the business about funeral homes, but regarding the question of the crematory he stated that he feels that it should be a permitted use and agreed that a public hearing should be held.

Village Administrator Dienberg summarized the three Options proposed to clarify the inclusion of crematories within the General Business District:

Option 1: Permitted Use Amending Section III, District No. 3 – General Business District, to include crematories as permitted use with specific criteria.

Option 2: Amend Section III, District No. 3 – General Business District, to include crematories as a special permitted use with specific criteria.

Option 3: Amend Section III, District No. 3 – General Business District, to explicitly prohibit crematories.

Chairman Emmert made the motion to hold a public hearing and that the proposed text amendment change would have two options with respect to crematories. One would be to have a text amendment to make it a Permitted Use in General Business, the other would be to make it a Special Permitted Use in General Business with respect to the crematory to be held on June 28, 2024 at 5:50 p.m.

Mr. Pitney seconded the motion. After discussion it was learned that June 28, 2024, is a Friday, and it could not be prior to that in order to comply with the the publication timeline. The amended motion was made by Mr. Koning to hold the Public Hearing on July 22, 2024, at 5:50 p.m., seconded by Chairman Emmert. Motion carried on the following roll call vote: Mr. Emmert: yes; Mr. Koning: yes; Mr. Pitney No. Mr. Pitney felt that a special meeting should be held to keep the project moving forward in a timely way.

Mr. Olson thanked the board for their time.

7. NEW BUSINESS

Mr. Emmert discussed the property at 314 North Benton informing the Zoning Board that the realtor for the vacant property contacted him for a zoning letter stating. The property is zoned Single Family Residential. He had prepared and signed the letter.

8. EXECUTIVE SESSION: Closed Session was not needed.

9. ADJOURNMENT

Mr. Koning made a motion to adjourn, seconded by Mr. Pitney. Motion carried on a roll call vote. Meeting adjourned at 7:06 p.m.

UNAPPROVED

Kellie Symonds, Deputy Clerk
Prepared from recording



Agenda Item Executive Summary

Item Name Request by Olson Funeral Home to Operate a Crematory Committee or Board Zoning

BUDGET IMPACT

Amount:	N/A	Budgeted:	N/A
List what fund:	N/A		

EXECUTIVE SUMMARY

Olson Funeral and Cremation Services has requested to operate a crematory at the Genandt Chapel location, located at 602 N Elida St. The Genandt Chapel, built and annexed in the 1970s, was acquired by Olson Funeral and Cremation Services in early 2024, marking their sixth location in Northern Illinois. The Village of Winnebago's current zoning ordinance does not explicitly address crematories in the General Business Zoning District. A proposed text amendment aims to clarify this by offering three options: permitting crematories as a permitted use, allowing them as a special permitted use, or explicitly prohibiting them. Each option includes specific criteria and regulations. If the Zoning Board is in favor of one of the three options, staff recommends holding a public hearing at the next possible regularly scheduled meeting for the Zoning Board.

ATTACHMENTS (PLEASE LIST)

Staff Memo, Site Plan, Informational Documents Regarding the Operation of a Crematory

ACTION REQUESTED

- ☒ For Discussion Only
- ☐ Resolution
- ☐ Ordinance
- ☐ Motion:

MOTION:

- ☐ Coming from Committee

Staff: Joseph Dienberg, Village Administrator Date: 6/3/2024



VILLAGE OF WINNEBAGO

MEMORANDUM

Prepared By:	Joseph Dienberg, Village Administrator
Meeting Name:	Zoning Board
Meeting Date:	June 3 rd , 2024
Item Name:	Request by Olson Funeral Home to Operate a Crematory

Background

The Genandt Chapel located at 602 M Elida St., which was built and annexed into the Village in 1970's as a funeral home, was purchased by Olson Funeral and Cremation Services earlier in 2024. Olson Funeral Home's began their operations in 1888, and the Genandt's location is their 6th location being operated in Northern Illinois. In April of 2024, Mr. Scott Olson, President and Funeral Director, inquired with Village Staff and Elected Officials about the possibility of constructing a crematory in the garage to the west of the building. (Pictured Below)



Currently, the Village of Winnebago Zoning Ordinance does not explicitly mention crematories as either permitted or special permitted uses within the General Business (District No. 3) Zoning District. It is being requested that the Zoning Ordinance be amended to address the status of crematories in this district.

Proposed Amendment

The following text amendment is proposed to provide clarity and guidance for the inclusion of crematories within the General Business Zoning District. The Zoning Board is presented with three options for consideration: permitting crematories as a permitted use, allowing them as a special permitted use, or explicitly prohibiting them.

Option 1: Permitted Use

Amend Section III, District No. 3 – General Business District, to include crematories as a permitted use with specific criteria:

Proposed Text: "Permitted Uses: Stores, shops, and offices for conducting any legal retail sales, personal service, professional or entertainment activity, including crematories, provided such uses comply with all applicable state and Village building, health, and fire regulations. A crematory may be constructed on or adjacent to any cemetery or on or adjacent to any funeral establishment, in accordance with Illinois Code (410 ILCS 18/10)."

Option 2: Special Permitted Use

Amend Section III, District No. 3 – General Business District, to include crematories as a special permitted use with specific criteria:

Proposed Text: "Special Permitted Uses: Garages; farm implement establishments; greenhouses and nurseries; lumber yards; fuel yards; wholesale sales outlets; warehousing, storage, and truck transport activities; and crematories, provided such uses comply with all applicable state and Village building, health, and fire regulations and are not located within 500 feet of any dwelling. A crematory may be constructed on or adjacent to any cemetery or on or adjacent to any funeral establishment, in accordance with Illinois Code (410 ILCS 18/10)."

Option 3: Prohibited Use

Amend Section III, District No. 3 – General Business District, to explicitly prohibit crematories:

Proposed Text: "Prohibited Uses: The operation of crematories is not permitted within the General Business District."

Rationale

Option 1 allows for straightforward establishment of crematories within the General Business District, facilitating ease of development and potentially meeting community needs for such services. By including the specific criteria from the Illinois Code (410 ILCS 18/10), it ensures that crematories are appropriately sited.

Option 2 ensures that the establishment of crematories undergoes additional scrutiny and regulation, allowing for community input and adherence to specific locational and operational standards to minimize potential impacts on neighboring properties. Including the specific criteria from the Illinois Code (410 ILCS 18/10) ensures compliance with state regulations.

Option 3 provides clarity by explicitly prohibiting crematories, thereby avoiding potential conflicts and ensuring that such facilities are directed towards more suitable zoning districts, such as Industrial or Agricultural Districts.

Next Steps

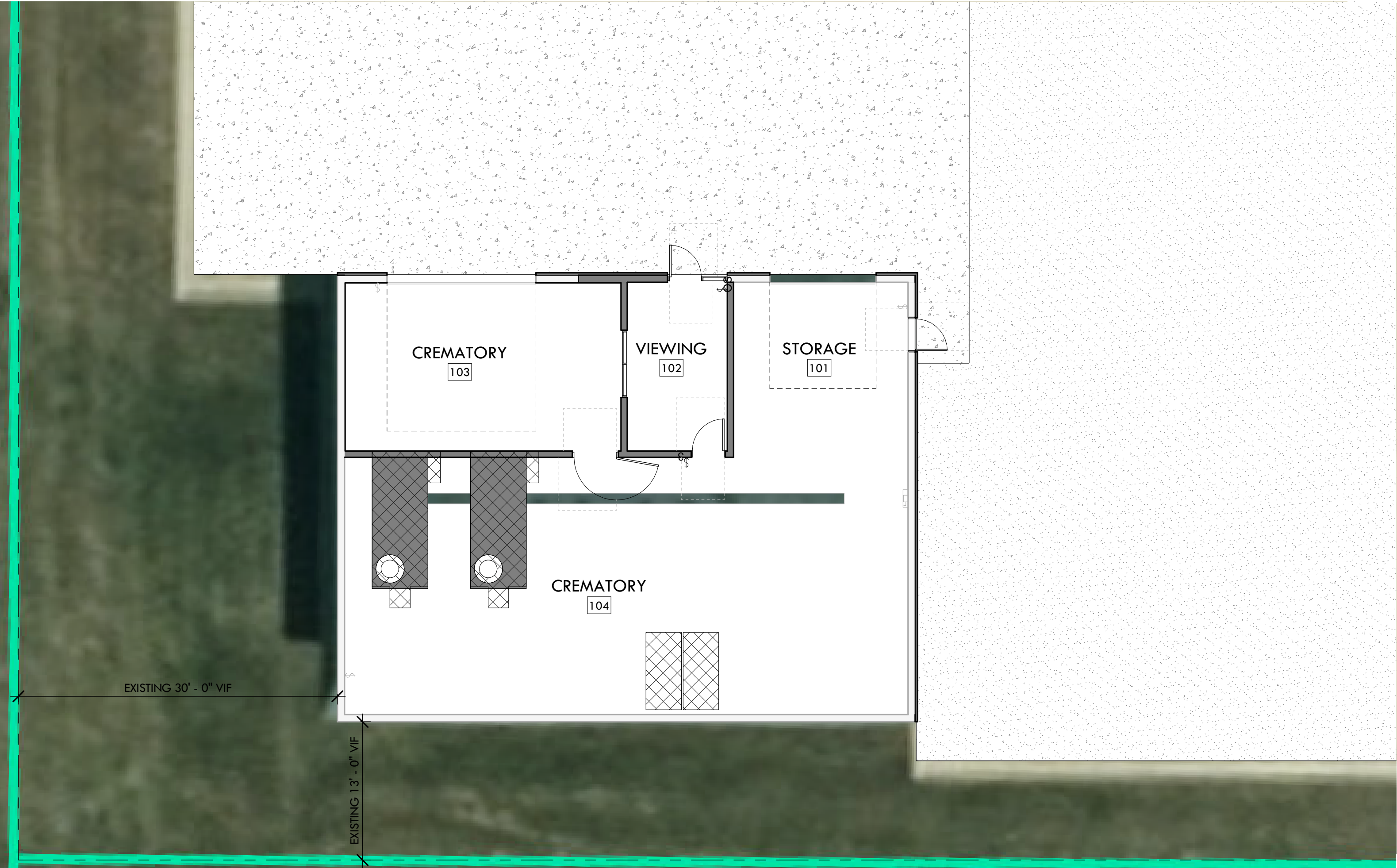
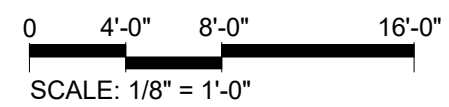
1. **Propose Concept at Zoning Board Meeting:** Present the concept at the Zoning Board meeting scheduled for Monday, June 3rd, at 6 PM.
2. **Text Amendment Process:**
 - If a crematory is desired by the Village, the Zoning Ordinance must be amended to include crematories as either a permitted use or a special permitted use.
 - To amend the Zoning Ordinance, a public hearing must be held before the Zoning Board on the text amendment. This public hearing must be advertised in a newspaper not less than 15 days nor more than 30 days prior to the hearing.
 - After the public hearing, the Zoning Board will hold a meeting (potentially on the same night) to vote on making a recommendation to the Village Board regarding the text amendment. If the vote is affirmative, the Village Attorney will draft an ordinance for the text amendment for the Village Board's vote.
3. **Village Board Vote:**
 - At their next regularly scheduled meeting, the Village Board can vote on the text amendment. If approved as a permitted use, the process is complete for the petitioner. If approved as a special use, the petitioner next steps will proceed.
4. **Special Use Permit Process:**
 - If the text amendment is approved to require a special use permit, the petitioner must request a Special Use Permit from the Zoning Board to establish a crematory at 602 N. Elida St., within District No. 3-General Business.
 - A public hearing must be held before the Zoning Board for the Special Use Permit request, with a newspaper publication of the hearing notice not less than 15 days nor more than 30 days prior to the hearing.
 - After the public hearing, the Zoning Board will meet (potentially on the same night) to discuss the Special Use Permit request and decide whether to recommend its approval, along with any conditions, to the Village Board.

5. Final Approval:

- If the Special Use Permit is recommended by the Zoning Board, an ordinance granting the permit with any specified conditions will be drafted.
- The Village Board will then vote on the ordinance granting the Special Use Permit. If approved, the ordinance will be recorded with the Winnebago County Recorder's Office.

This roadmap outlines the process for considering and implementing the proposed text amendment, providing clarity on the next steps.





May, 14th 2024

Scott Olson
Olson Funeral and Cremation Service, Ltd.
2811 N MAIN STREET
ROCKFORD, IL 61103

Dear Mr. Olson,

In response to our recent conversation, the following are FAQ's that could arise as it relates to the installation of a cremation system:

Will there be smoke and odor?

Under normal operating conditions there will not be any smoke or odor. Our equipment protects against this by a large internal secondary chamber whereby the products of combustion are re-burned or cleansed prior to their discharge into the environment. It is equipped with a proactive opacity (visual) monitor. The opacity monitor is continuously scanning the existing gases and takes automatic action by turning off the cremation burner if the opacity reaches a level of 10%. For a lack of a better description, this would be similar to smoke wafting from the tip of a cigarette.

Is the equipment environmentally safe?

Yes. Matthews Environmental Solutions currently have over 5,000 installations globally and several units operating within the Caribbean region. The emission levels are well below permissible levels.

Will the facility be operating 24/7?

It will not. It's estimated to be idle or non-operational 66% of the time.

Will it be loud?

It will not. The noise emitted is similar, to an air conditioner running.

Will it decrease property values?

This argument has never been authenticated. Funeral Homes are typically located in residential or light commercially zoned areas as that is where they are to serve their community. Funeral Homes are typically the best maintained property.

Matthews Environmental Solutions

2045 Sprint Boulevard | Apopka, Florida 32703

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

Matthews
INTERNATIONAL*

Matthews Environmental Solutions is a (MATW) Matthews International company

What about Mercury?

The subject of Mercury arises on occasion. The USEPA defines Mercury as a natural occurring element. The reality is, Mercury from the cremation process is an insignificant source of Mercury emissions. Unfortunately, there is so much inaccurate information on the Internet that some people will believe it to be true.

Sincerely,



HECTOR LA ROSA
ACCOUNT EXECUTIVE
MI, IN, IL, WI, MN



O: 407.886.5533 x 6184 | F: 412-224-4167

hlarosa@matw.com | MatthewsEnvironmentalSolutions.com

2045 Sprint Blvd | Apopka, FL 32703-7762

Matthews Environmental Solutions and Matthews Memorialization are (MATW) Matthews International companies.

Matthews Environmental Solutions

2045 Sprint Boulevard | Apopka, Florida 32703

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

Matthews
INTERNATIONAL®

Matthews Environmental Solutions is a (MATW) Matthews International company



May, 14th 2024

Scott Olson
Olson Funeral and Cremation Service, Ltd.
[2811 N MAIN STREET](#)
[ROCKFORD, IL 61103](#)

Dear Mr. Olson,

As a follow-up to your request, this letter will review some facts regarding the common placement of cremation equipment within a funeral related facility.

Matthews Cremation Division has been designing, manufacturing and installing combustion systems for a broad range of industries for over 70 years. We are recognized as the leader in cremation equipment, with over 4,500 installations throughout the United States and 50 countries. Our designs have been granted U.S. patents and have been adopted as industry standards for quality and performance. In addition, we are the largest service and repair organization, servicing all brands of cremation equipment.

Our company has been involved with the various fields of combustion for many years, and directly related to the cremation industry for over 52 years. We are a member in good standing with the Cremation Association of North America and became its first supplier member approximately 40 years ago.

As the largest manufacturer of cremation equipment, our company annually markets over 70% of our production to the funeral industry. Most funeral establishments are located in residential communities and/or light commercial areas, since they are there to serve the local population. The cremation equipment is installed within the funeral home and is generally considered by most zoning regulations to be an extension of existing business and/or services.

The equipment operates without smoke or odor, and each and every installation must be permitted by the environmental authorities for the city, state or province in which it is installed. The equipment we manufacture is Underwriters Laboratories (UL) listed, confirming maximum safety of both equipment and personnel.

In addition, in Canada our equipment is built to the standards of the Canadian Gas Association (CGA) and is inspected and approved by them for safety of both the electrical and gas control systems.

Each model manufactured by our company is tested by an independent testing laboratory against standards set forth by the federal government. Our equipment's emission levels are substantially lower than the allowable standards to ensure environmental quality. Residents of the area will not be aware the equipment is operating.

All machinery that performs combustion, whether automobiles or furnaces of any type (fireplaces or crematories), gives off byproducts referred to as *particulate matter*. Because of our equipment's high-quality standards, these byproducts are not visible, nor is there an odor of the material being combusted.

The equipment operates automatically and has built-in pollution detection equipment that constantly supervises the operation, safeguarding against pollution and environmental impact. Cycle time is approximately two hours. When this cycle time is multiplied by the annual frequency of use, the actual hours of operation become insignificant.

The cremation rate in Illinois is rising and it is of vital importance that these services be locally available to residents of the community of Winnebago, to help minimize cost to them and fulfilling their demands.

I appreciate your interest and concern regarding the basic information surrounding the installation of cremation equipment. Please feel free to distribute this letter of information to any individuals and/or group that might have interest.

Should you or others require additional information or have questions about anything in this letter, please call me using our toll-free number: 800-327-2831.

Yours very truly,



HECTOR LA ROSA
ACCOUNT EXECUTIVE
MI, IN, IL, WI, MN



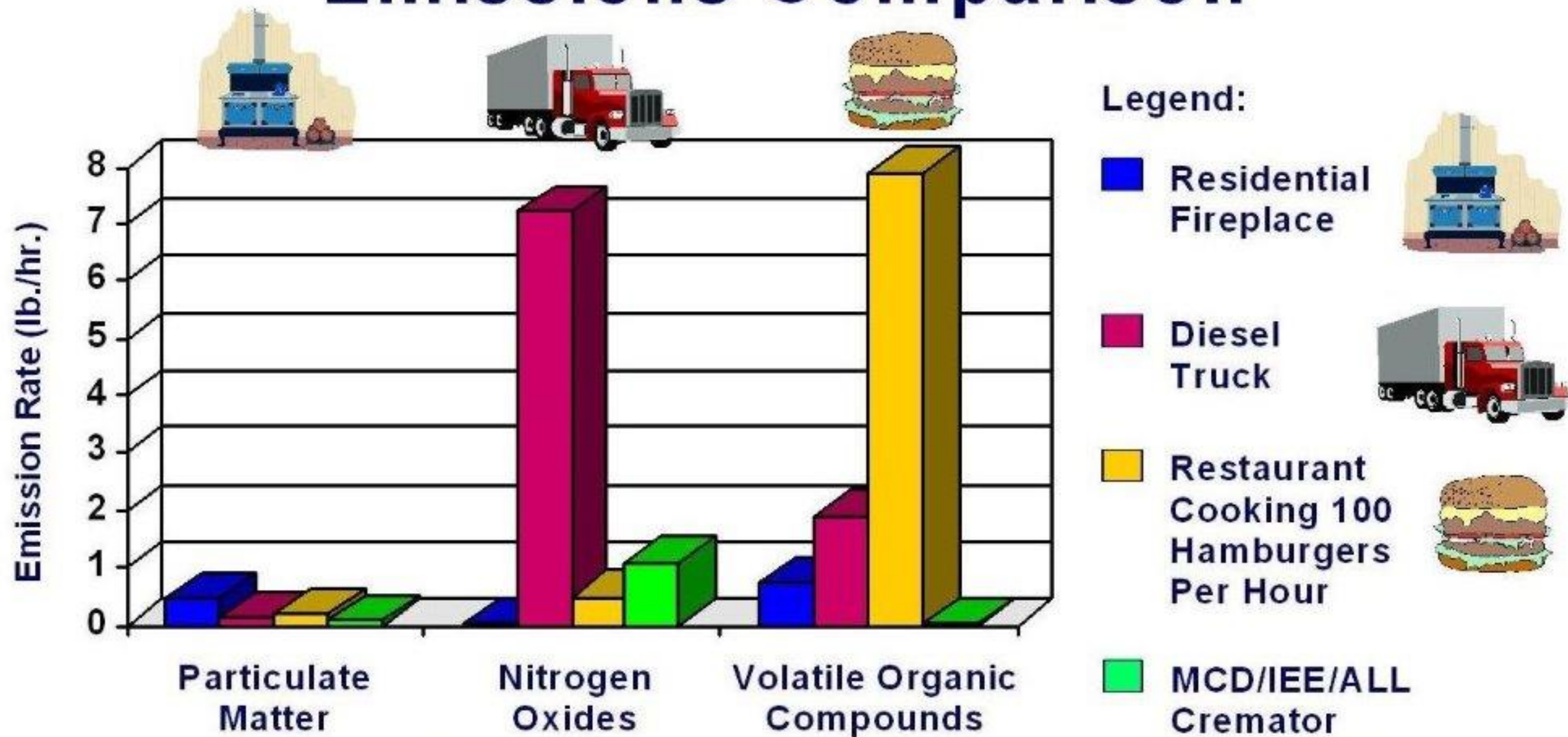
O: 689 336 7713 | F: 412-224-4167

hlarosa@matw.com | MatthewsEnvironmentalSolutions.com

2045 Sprint Blvd | Apopka, FL 32703-7762

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Emissions Comparison



Emissions from Cremation Equipment

Does cremation equipment have unusual emissions?

No, emissions from crematories are similar to restaurants, vehicles and home fireplaces.

Since the 1990 Clean Air Act air pollution discussions have often included crematories. Knowing this, we have spent tremendous amounts of time and money to be certain we have accurate environmental data on the emissions from crematories. We have found in past dealings with the EPA, that our industry is misrepresented unless we have good quality information on which we can defend ourselves from over regulation.

Emissions from cremation equipment are the same types you might find from other very common sources of air pollution. Below you will find a brief description of the most common regulated pollutants from a crematory and a comparison to give a point of reference.

Particulates (PM) - Solid matter such as dust, soot, ash and other unburned particles from the human remains, cremation container and contents of the container.

Average Particulate Emissions (Expressed in pounds per hour)	
A Typical State Standard	.39 lbs/hr
B Cremation with casket/container	.08 lbs/hr
C Wood Stove	.46 lbs/hr
D Restaurant Cooking 100 burgers/hr	.18 lbs/hr
E Diesel Truck	.14 lbs/hr

Carbon Monoxide (CO) - A gaseous pollutant resulting from the incomplete combustion of fuel, cremation container and human remains.

Average Carbon Monoxide Emissions (Expressed in parts per million, PPM @ 7% oz)	
A Typical State Standard	.24 lb/hr
B Cremation with casket/container	.06 lbs/hr
C Wood Stove	3.5 lbs/hr
D Restaurant Cooking 100 burgers/hr	Not Avail.
E Diesel Truck	22 lbs/hr

As you can clearly see, emissions from cremation equipment are not unusual but rather common to our everyday life experiences. In addition, the actual emission levels of cremation equipment are surprisingly low to most people.

Cremation equipment that is properly designed, operated and maintained will be a "good neighbor" to the other businesses and people that come into contact with it.

PowerPak I

The Basic Essential

- Smoke-Buster™ 138 Emission Control
- Ideal for New or Low-Volume Crematories
- Designed for 4 cremations per day
- Automatic operation, most fuel-efficient in its class



**Shown above with optional
M-pyre® control panel

The Future Of Cremation

M Matthews®
ENVIRONMENTAL SOLUTIONS

Just Right for Your Business

The PowerPak I Cremation System is designed to meet the needs of low-volume cremation businesses that perform four or less cremations each day. Whether you're just starting out, or you're adding cremation as a new service for the families you serve, you want reliable equipment from a manufacturer you can trust. That's why we've taken our decades of field-proven innovation and experience and engineered them into every detail of the PowerPak I.

The PowerPak I is just right for your business. It's fully automated, and can be modified to work with our advanced M-pyre 2.0 remote operating and monitoring system. And because it's the fastest and most fuel-efficient cremator in its class, you'll save time and money that you can use to build your business for the future.

Ready To Go

The PowerPak I arrives at your doorstep ready to go. It comes pre-wired, pre-piped, and pre-tested. All you have to do is off-load your cremator, provide one connection for gas and one for electricity, and be prepared to accommodate the exhaust stack. That's it: as simple as one, two, three.

Automatic Operation

The self-monitoring control system simplifies the cremation process and allows your cremator to shut itself off upon completion of the cycle.

Operator Safety

We're serious about safety. That's why our cremators are tested and listed by Underwriter's Laboratories (UL).



The Future Of Cremation: Matthews Gives You More

Matthews is redefining the future of cremation. We offer a powerful partnership that gives you access to our global resources and combines all of our engineering talents. With more than 100 years of experience and 4,500 installations in over 50 countries, we are the most trusted brand in cremation technology and service. Count on Matthews to help build your business for both today's challenges and tomorrow's opportunities.

Visit us at MatthewsCremation.com.

■ Quiet Operation

Exclusive *Whisper Shield* allows operation without disturbing other services.

■ Angled Burners

Innovative burner design improves productivity and saves fuel.

■ Cremation Chamber Floor

Unique *Hot Hearth* design eliminates fluid runoff and minimizes fuel consumption.

■ Automatic Loading Door

Heavy-duty door opens and closes at the touch of a button.

■ Smoke Buster™ System

Advanced chamber airflow for complete combustion of smoke and odor.

■ Added Insulation

A full 12" of multi-component material to increase operator safety and reduce heat loss & maintenance costs.



**Configuration above shown with basic control panel. Upgraded control panels are available.

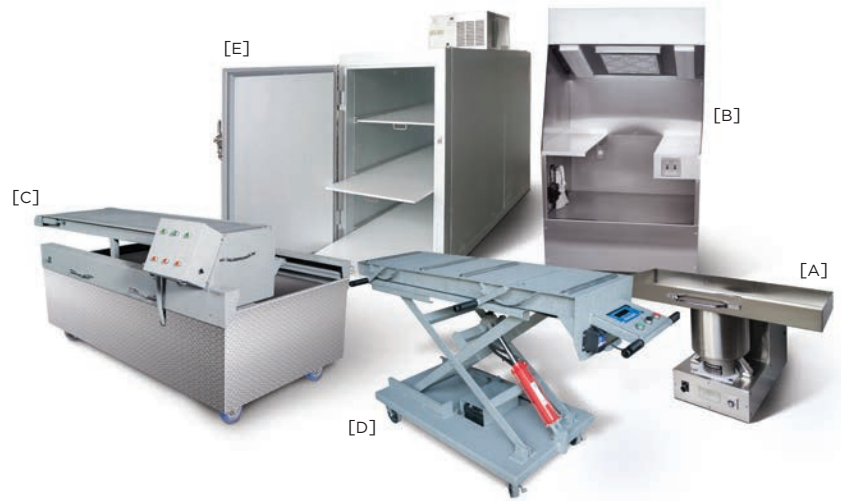
The Power of Partnership

- Financial ROI Analysis
- Zoning and Permitting Support
- Operator Training and Certification
- 24/7 Customer Service and Support
- Custom Engineering and Design
- Facility Layout and Design
- Crematory Accessories and Supplies
- Leasing and Financing Options
- Turn-Key Installation

PowerPak I Specifications

Overall Height:	8' 4" (2.54 m)
Overall Width:	6' 5" (1.98 m)
Overall Length:	14' 8" (4.47 m)
Weight:	23,400 lb. (10,614.1 kg)
Fuel:	Natural or L.P. Gas (Oil available)
Electrical:	230 volts, 1-phase/3-phase
Control panel can be located right, left or remote	

Get the Most from Your Matthews Cremator



System Accessories

[A] ECP-200 Electric Cremated Remains Processor

- Reduces cremated remains to fit standard-sized urns
- Average processing time ≤ 30 seconds
- Quiet and dust-proof

[B] VPS-1 Processing Station

- Recovers dust when transferring cremated remains for operator safety
- Ventless design eliminates wall or ceiling openings
- Built-in overhead lighting adds convenience and safety
- Steel frame construction, finished with heavy-gauge stainless steel

[C] Auto-Loader

- Increases production and enhances operator safety
- Extends the cremation chamber floor life
- Offers a professional presentation during family viewing

[D] Hydraulic Lift Table - LT1BS

- Includes battery and scale

[E] Three-Body Cooler

- Safe storage until final disposition
- Thermostatically controlled system maintains constant temperature
- Removable shelves accommodate a mortuary cart or caskets

[M] M-pyre® 2.0

- Most advanced cremation technology through our M-pyre®2.0 system with intuitive logic control (ILC).
- Allows internet connection to enjoy the ability to remote preheat, monitor the cremator activity, view performance reports, track maintenance and communicate directly to your Matthews team.

SOUND	NOISE LEVEL (dBA)	EFFECT
Jet Engines (Near)	140	
Shotgun Firing	130	
Jet Takeoff (100-200 Ft.)	130	
Rock Concert (Varies)	110-140	Threshold of pain (125 dB)
Oxygen Torch	121	
Discotheque/Boom Box	120	Threshold of sensation (120 dB)
Thunderclap (Near)	120	
Stereo (Over 100 Watts)	110-125	
Symphony Orchestra	110	Regular exposure of more than 1 minute risks permanent hearing loss (over 100 dB)
Power Saw (Chain Saw)	110	
Jackhammer	110	
Snowmobile	105	
Jet Fly-over (1000 Ft.)	103	
Electric Furnace Area	100	No more than 15 minutes of unprotected exposure recommended (90-100 dB)
Garbage Truck/Cement Mixer	100	
Farm Tractor	98	
Newspaper Press	97	
Subway, Motorcycle (25 Ft)	88	Very annoying
Lawnmower, Food Blender	85-90	Level at which hearing damage (8 hrs.) begins (85dB)
Recreational Vehicles, TV	70-90	
Diesel Truck (40 Mph, 50 Ft.)	84	
Average City Traffic Noise	80	Annoying; interferes with conversation; constant exposure may cause damage
Garbage Disposal	80	
Washing Machine	78	
Dishwasher	75	
Vacuum Cleaner	70	Intrusive; interferes with telephone conversation
Hair Dryer	70	
Normal Conversation	50-65	
Quiet Office	50-60	Comfortable (under 60 dB)
Refrigerator Humming	40	
Whisper	30	Very quiet
Broadcasting Studio	30	
Rustling Leaves	20	Just audible
Normal Breathing	10	
	0	Threshold of normal hearing (1000-4000 Hz)

Mpyre cases last 12 months (since 7/1/2019)

	Emissions								
	No			Yes			Total Cases	Total % total	Total Avg Duration
Size	Cases	% total	Avg Duration	Cases	% total	Avg Duration			
1-Small	16,681	99.65%	101.4	59	0.35%	93.4	16,740	100.00%	101.4
2-Medium	158,806	99.07%	118.9	1,489	0.93%	110.7	160,295	100.00%	118.9
3-Large	71,908	98.99%	161.9	733	1.01%	163.2	72,641	100.00%	163.2
4-Obese	6,328	96.38%	222.9	238	3.62%	202.7	6,566	100.00%	222.9
Grand Total	253,723	99.02%		2,519	0.98%		256,242	100.00%	222.9

Talking Points

- We did over a quarter million cremations in the last 12 months with Mpyre.
- Over 99% of those had no "emission incidents". That's where there is any visible smoke that lasts longer than 30 seconds
- Any manufacturer who says their machines never smoke isn't really being truthful with you. At Matthews we try to do something better. We log all that data so we can tell you exactly how often it happens. Out of the quarter-million cremations we did with Mpyre in the last 12 months, we had emission incidents 0.98% of the time. That's less than 1%. It's not zero, but we think it's pretty good.
- We also did more than 6500 obese cases. Just for context, most crematories see a few obese cases each month. Our team sees more than 125 a week.
- Obese cases are tricky to cremate. They take over twice as long, and they're 4x more likely to smoke, so they have to be managed carefully
- That's where Instant Support can help. You click that button on your cremator and our Mpyre team is notified right away. We are on chat, on the phone and directly connected your machine to help you manage that case.