

# THE Onsite Journal

**NOWRA**  
National Onsite Wastewater Recycling Association

Fall 2024

Conference  
Preview  
Issue



## Onsite | 2024 Spokane, WA Wastewater Mega-Conference

Celebrating Tomorrow's Environment  
Clean Water for the Future

**October 20-24, 2024**

Spokane Convention Center  
Spokane, WA

Page 20

**Also Inside:**  
SepticSmart Week  
September 16-20  
Page 14  
Lid Safety Update  
Page 16



# Simple Solutions for Challenging Sites

Eljen works closely with regulators, designers, and installers to find solutions for challenging sites.



From training on site, online, or in the classroom, Eljen has you covered

Call us today at 800-444-1359 or email [info@eljen.com](mailto:info@eljen.com)



*Innovative Onsite Products and Solutions Since 1970*

[eljen.com](http://eljen.com)



2024 Mega-Conference  
Preview, page 20



**Onsite** | 2024  
**Wastewater**  
**Mega-Conference**  
Spokane, WA

Celebrating Tomorrow's Environment  
Clean Water for the Future



## ADVERTISER INDEX

American Manufacturing Company .....	BC
Ashland Pump .....	12
BioMicrobics .....	12
Clearstream Wastewater Systems, Inc... ..	34
Eljen Corp.....	IFC
Geoflow/Anua .....	13
Hiblow .....	6
Imperial Industries .....	27
Infiltrator Water Technologies .....	17,33
Inspector Cameras .....	9
JET .....	7
National Precast Concrete Association .	23
NSF .....	25
PolyLok .....	19
Tuf-Tite.....	IBC
WaterColor Management .....	29



## INSIDE THIS ISSUE

Message From the Executive Director.....	4
A Note From the President.....	5
NOWRA Annual Meeting Notice .....	5
State Affiliate News.....	6
NOWRA Board of Directors 2023–24.....	8
NOWRA Board Member Election.....	8
Legislative Update .....	11
How Will You Honor SepticSmart Week? .....	14
Using a Secondary Barrier .....	16
2024 Mega-Conference Preview .....	20
NOWRA Online Learning Academy.....	28
Corporate Members.....	30
Industry News.....	31
BenefitHub Discounts.....	32



**PUBLISHED BY THE NATIONAL ONSITE WASTEWATER RECYCLING ASSOCIATION**

Contents may not be reproduced by any means, in whole or in part, without prior written permission from the National Onsite Wastewater Recycling Association. © 2024. All rights reserved.

### National Onsite Wastewater Recycling Association

Thomas Groves, Executive Director  
P.O. Box 982, Westford, MA 01886  
Phone: 978-496-1800 | Fax: 703-997-5609  
Email: [info@nowra.org](mailto:info@nowra.org)

### *The Onsite Journal*

Kale Connerty, *Editor*  
Anish Jantrania, *Technical Editor*

To advertise in this publication, contact:  
Thomas Groves  
NOWRA Executive Director  
[info@nowra.org](mailto:info@nowra.org)

*The Onsite Journal* design and layout by  
Fishergate Graphic Design  
[www.fishergate.com](http://www.fishergate.com)

# MESSAGE FROM THE EXECUTIVE DIRECTOR



Welcome to the fall issue of NOWRA's *Onsite Journal*. This is our last of three issues for 2024 and our biggest one yet. We consider this our conference preview issue, so we have included a lot of great information on the 2024 Onsite Wastewater Mega-Conference being held in Spokane, Washington in October, but we've also included a timely article on the issue of septic tank lid safety (page 16).

We are excited to not only have a great opening session, a full array of technical sessions, and a sold-out exhibit hall for the 2024 Mega-Conference, but we are also excited to feature many other exciting opportunities to network in Spokane. We are pleased to announce the return of the Backhoe Roe-D-Hoe to Washington. In addition, we have included an educational field trip, fun social event at the famous Steam Plant, and our first Emerging Professionals Scholarship golf tournament.

Our conference theme is "Celebrating Tomorrow's Environment: Clean Water for the Future," so plan to come out early or stay after the conference to explore this wonderful small city as they celebrate the

50th anniversary of the World's Fair in Spokane.

Summer has been an extremely busy time for NOWRA as we are gearing up for the conference. We hosted two successful webinars in late spring for members of the National Environmental Health Association (NEHA) on the importance and management of onsite wastewater. Environmental health professionals are an important group that is often overlooked when thinking about onsite wastewater education and we hope they will think of NOWRA as a resource in the future.

In addition, we began providing more direct benefits to our members by adding FREE members-only business courses to our Online Learning Academy on insurance risks and running a successful business. We also rolled out a member benefit discount program called BenefitHub that provides discounts on commonly used items for small business operators. Lastly, watch for future announcements coming soon on our new and improved SepticLocator member directory.

As I conclude in every issue, this organization is only as strong as its

members and volunteers. We are currently undertaking a strategic planning effort for NOWRA this fall to continue to improve the organization, so watch out for the results from that effort. Much of the great work that you will read about inside of the publication is due to the dedicated committee members and volunteers. As you read about NOWRA's activities, please consider joining a committee or task force. We will be holding an election starting in September for four open seats on the NOWRA Board. If not this year, please consider getting involved at your state association or national level. It's a great opportunity to expand your horizons, network with like professionals, feel good about yourself and the industry that we have chosen, and make life-long friends.

Thank you for allowing me to serve as the executive director of this great organization. I look forward to seeing many of you in Spokane!

— **Thomas Groves**

## ***Tell NOWRA what we can do for you!***

Send us an idea or benefit that you would find helpful as a member of NOWRA and/or your state affiliated organization. Email us at [info@nowra.org](mailto:info@nowra.org)



# A NOTE FROM THE PRESIDENT



**M**y term as NOWRA’s president is almost over and shortly after the conference I will be handing the gavel over to Chris LeClair, our current vice president from the great state of Minnesota. It has been a fun and challenging endeavor for me, and a fitting way to finish off my career.

The number one thing I have tried to do in my actions and words on the board of directors has been to find ways for NOWRA to network and give back to you, the membership and our affiliates. During the early years of the association there was not a lot NOWRA could do but through amazing leadership and hard work we now can offer you something back. Several things have been initiated and there are a couple of good things yet to come before the end of the year. I sincerely hope at least one thing we have done means something to you.

I have been blessed to have been part of this association for my entire career in the onsite and decentralized wastewater industry. I will forever be grateful to the two companies I worked for (BioMicrobics and Infiltrator Water Technologies) that allowed me to participate in the Kansas Small Flows Association (KSFA) and NOWRA in many roles over the years.

In just over 23 years in the industry, I have served, chaired committees, and been on the board of directors and executive committee for both KSFA and NOWRA. I met so many great people and learned so much from my mentors and colleagues and from my work in the field. I know I was able to share what I learned with many and make a difference. That is truly all I could have hoped for in my career.

Retirement life is calling and while I will still serve as NOWRA’s past president for two more years, I feel like I am close enough to the finish line to say “Wow, what a ride!” If you are not already, please consider getting active, sharing what you know, and keep learning! If you participate and give back your ride will be as great as mine!

— **Allison Blodig, R.E.H.S.**

## **NOWRA Annual Business Meeting Tuesday, October 22, 2024 Spokane Convention Center, Room TBD 5:00 PM – 6:30 PM**

In accordance with Article III, Section 7 of the NOWRA Bylaws, all NOWRA members are formally notified through this communication of the Annual Membership Meeting, scheduled to occur on October 22, 2024 from 5:00-6:30 pm. The NOWRA 2024 Annual Membership Business Meeting will be held in the Spokane Convention Center, Spokane, WA. All members are urged to attend and participate in this meeting. This notice was placed on the [NOWRA website](#).

### **Agenda**

1. Roll Call—A master membership list will be available.
2. Reading of the 2024 Annual Meeting Notice
3. President’s Report
4. Secretary-Treasurer’s Report
5. Executive Director’s Report
6. Committee Report
7. Other Business
8. Open Member Discussion
9. Adjournment

# STATE AFFILIATE NEWS

**OOWA (Ohio)** — Greetings from the Buckeye State! The Ohio Onsite Wastewater Association is busy planning the 2025 OOWA Annual Conference. It is set to take place on January 7-8, 2025, at the Cherry Valley Hotel in Newark, OH. We are looking to continue to grow on the success of the 2024 Annual Conference and ROE-D-HOE Competition!

**NOWWA (Nebraska)** — We have begun the planning process for our 2025 convention. The first planning meeting was held in early August and we expect to have contacted presenters soon after that. We will also be working on a training event this fall for our contractors to get their professional development hours. Finally, we hope to soon be formally introduced to the interim director of the Nebraska Department of Energy and Environment.

**YOWA (New England)** — The Yankee Onsite Wastewater Association hosted “Nitrogen and the Effect on Onsite Wastewater Systems” on June 25. More than 40 professionals attended this full-day, in-person training. The program featured speakers from the Massachusetts Department of Environmental Protection, Massachusetts Alternative Septic System Technology Center, and Atlantic Solutions and included presentations on the nitrogen cycle, nitrogen loading and limitations, and regulatory updates. Presentation slides are available on YOWA’s website under “Archived Training.”

[See full listing of NOWRA state affiliates.](#)



**HIBLOW** *Stirring \$#!+ Up Since 1972!*

**HIBLOW-USA.com • 734-944-5032**

*The Heart of a Healthy System*

The advertisement features a cartoon illustration of a septic tank system. Above the ground, a HIBLOW pump is shown connected to a pipe that enters a septic tank. Inside the tank, several green, smiling microbes with arms and legs are depicted, some holding forks and knives, as if they are eating. The tank is filled with brown liquid and blue bubbles. To the right of the tank is a vertical pipe leading to a clear blue water reservoir. The background shows a house, a sun, and trees.

# ILLUMI-JET UV DISINFECTION UNIT<sup>®</sup>

## MODEL 952

- UL listed as a NEMA 6p enclosure (watertight submergence test)
- Install directly in ground or in pump tank on the effluent line
- Complete disinfection without the use of chemicals
- Hermetically sealed electrical components
- High capacity disinfection reservoir
- Kapton<sup>®</sup> seals improve serviceability
- Rated treatment of 10 gallons/min

*\*Replacement parts to fit most UV disinfection units*

Easy to service

Rugged construction

Dependable electrical design

Innovative disinfection design



[www.jetincorp.com](http://www.jetincorp.com)

# NOWRA BOARD OF DIRECTORS 2023-24

## EXECUTIVE COMMITTEE DEC 2023—NOV 2024

**Allison Blodig, R.E.H.S.**  
**(President)**

Owner  
GYST Consulting  
Ozawkie, KS

**Chris LeClair, R.E.H.S.**  
**(VP/President Elect)**

Director—Land &  
Resource Management  
Ottertail County  
Fergus Falls, MN

**Jim King**  
**(Treasurer)**

President  
Eljen Corporation  
Windsor, CT

**Sara Heger, Ph.D.**  
**(Past President)**

Research Engineer &  
Adjunct Asst. Professor  
University of Minnesota,  
Water Resources Center  
St. Paul, MN

**Kwame Agyare, P.E.**

President  
Agyare Engineering Services, Inc.  
Fremont, CA

**Michael Broussard**

Liquid Waste Program Manager  
New Mexico Environment Department  
Santa Fe, NM

**Kate Carney, P.E.**

Owner, Church OWC, LLC., Golden, CO

**Chris Chapman**

Owner, Show Me Soils, St. Clair, MO

**Ashley Donnelly**

Technical Training and Sales  
Development Manager  
Infiltrator Water Technologies  
Old Saybrook, CT

**Claude Goguen**

National Precast Concrete Association  
Director of Outreach and Technical Education  
Carmel, IN

**Josh Gunia**

Vice President, A Advanced Septic &  
Construction, Services, Sumner, WA

**Gary Hawkins, Ph.D.**

Agricultural and Biological Engineer  
University of Georgia, Watkinsville, GA

**Anish Jantrania, Ph.D., P.E., M.B.A.**

Associate Professor, Texas A & M University  
College Station, TX

**Tricia Scott**

Onsite Wastewater Program Specialist  
NE Dept. of Environment and Energy  
Lincoln, NE

**Jerry Stonebridge**

Owner, Stonebridge Environmental, Inc.,  
Freeland, WA

**Robert Sweeney**

President, Environmental Management  
Systems, Inc., Milwaukie, OR

## HELP ELECT NOWRA'S NEW BOARD MEMBERS



NOWRA is in the process of electing new members to our Board of Directors, who will serve a three-year term starting December 1, 2024 and ending November 30, 2027.

NOWRA's 16-person board consists of a 4-person executive committee and industry representatives from each of the following six onsite industry categories: academia, designer/engineer, regulator, supplier/manufacturer, installer, and service provider.

[NOWRA members can vote for board nominees HERE.](#)





**QUALITY SERVICE**  
THE WAY IT SHOULD BE

From  
**\$7000**

**Wi-Fi**  
Functionality



From  
**\$2745**



## SYSTEMS • SERVICE • SUPPORT

### Easy Ordering Fast Shipping

Our equipment is in stock and ready to ship when you need it, ensuring your business stays up and running.

### Rugged and Cost-Effective

With a modular design and replaceable parts, our equipment offers value for your company.

### 24 Hour Service Turnaround

We aim to diagnose and repair your equipment in 24 hours to keep you in the field.

### In-House Customer Support

Our experts are here to assist with technical questions, service needs, troubleshooting, and product selection.



603-267-0400



[sales@inspectorcameras.com](mailto:sales@inspectorcameras.com)



[www.inspectorcameras.com](http://www.inspectorcameras.com)





**Your Online Source for  
Continuing Education**

*Convenient High-Quality Onsite Wastewater Training at Your Fingertips*



- Courses from 1-Hour to Multi-Hour Bundles
- Developed by Industry Professionals

*Over 50 Courses in the Following Areas:*  
**Onsite Wastewater A-to-Z • Installer Training  
Technical Sessions • Troubleshooting • Design Courses**

**Visit [www.nowra.org/education](http://www.nowra.org/education) for a full class list and descriptions.**

**NOWRA and State Affiliate Members  
GET THE LOWEST RATE!**

**Visit [www.nowra.org](http://www.nowra.org) for more information  
PO Box 982, Westford, MA 01886 • (978) 496-1800 • [info@nowra.org](mailto:info@nowra.org)**



# LEGISLATIVE UPDATE

## *Decisions, Decisions, Decisions!*

By Tim Perrin, Polsinelli

**E**lections years are roller coaster rides. The ups and downs, twists and turns—we expect to be jostled about. But who predicted this summer’s wild ride! So, what will the next several weeks leading up to Election Day have in store for us? Who knows. But most of us are probably expecting a September surprise in addition to an October surprise!

Regardless of how many loops and dips we experience as the Presidential and Congressional candidates compete, there are a number of things we can reliably anticipate and prepare for as an association:

### **1. We will have a new President**

With President Biden withdrawing from the 2024 contest and Vice President Harris securing the Democrat party’s nomination, we know we will have either a Harris Administration or a second Trump Administration. The election winner will nominate a fresh slate of officials to run the federal departments and agencies, even if a Harris Administration is expected to hew closely to the policies of the Biden Administration. A second Trump Administration is expected to mirror the policies of the former president’s first term. For those living in a battleground state, buckle up. Non-stop political ads and robocalls are coming.

### **2. We will have a new Congress**

The U.S. Senate and U.S. House of Representatives will begin the legislative process afresh. Anything not passed in this current Congress, the

118th, will have to be reintroduced and considered in the new Congress. With 45 House Members and 8 Senators not running for re-election, Congress will have many new faces. And regardless of which party wins control of each chamber, we will have some new party leaders and new committee chairs.

### **3. We have a good idea what policies will be considered**

The current era of divided government (Democrat controlled White House and Senate, Republican House) has shown what can and cannot be accomplished policy-wise. And recent examples of unified government in 2017–18 and 2021–22, when one party controlled the White House and both chambers of Congress, demonstrated how far the policy pendulum can swing. Further, our familiarity with the political players involved helps set our expectations for policy action next year.

---

Although we have some confidence about the 2025 landscape, there are several variables that are tough to anticipate at this point, making future planning challenging. Here’s are a few to watch:

#### **1. House and Senate margins**

The current majorities in each chamber are razor thin. While this has forced a fair amount of bipartisanship, it also makes governing hard. Just ask former House Speaker Kevin McCarthy!

#### **2. Lame-duck session**

The results of the election will dictate the length and scope of the “lame-duck session” of Congress when it convenes after the election, which will begin in mid-November and run through early December. Policymaking progress can be prompted or hindered by whether Republicans or Democrats think they have a stronger negotiating position this year or next year. The question to ask is what policies will be considered during the lame duck and which ones will be punted into next year?

#### **3. External factors**

We’ve seen this summer how President Biden’s exit from the campaign and the assassination attempt on former President Trump impacted both the Harris and the Trump campaigns. In addition to external political factors, the state of the economy and foreign events/conflicts can drive the news cycle as well as the policymaking process.

#### **4. SCOTUS impact**

In late June, the U.S. Supreme Court announced arguably one of the most significant decisions in decades. By a 6-3 vote, the justices overturned the court’s 1984 decision in *Chevron v. Natural Resources Defense Council*. This 40-year case led to the *Chevron* doctrine, whereby courts allowed federal agencies to reasonably interpret vaguely worded legislation passed by Congress. With *Chevron* overturned, federal courts will no longer give deference to federal agencies. Instead,

*continued on page 12*

# MicroFAST<sup>®</sup> wastewater treatment systems



MicroFAST<sup>®</sup> is BioMicrobics' flagship product, a simple, robust, wastewater treatment system for residential applications.

Treats 500-9,000 GPD using aerated attached growth microbes.

**BIO MICROBICS**

BETTER WATER. BETTER WORLD.™

1-800-753-3287

www.biomicrobics.com  
sales@biomicrobics.com

©2024 BioMicrobics Inc. All Rights Reserved.



## LEGISLATIVE UPDATE

*continued*

the federal judges themselves will decide disputes over contested laws.

Many commentators have said this decision significantly curtails the power of the executive branch's administrative state. While some lament the court's action because it will bog down the federal court system, which is expected in the near-term, others hail the decision because it will require Congress to be more prescriptive in the drafting of legislation. Regardless of perspective, this decision promises to significantly shake up how federal stakeholders in all three branches of government make, carry out, and interpret policymaking.

The policy areas of environment, healthcare, energy, education and taxation are expected to encounter the most challenges in federal court. Even as the impact of this decision becomes more apparent, the ripple effects will certainly be seen and felt in how the next president and the new Congress carry out their agendas.

*Tim Perrin is a Senior Policy Advisor with Polsinelli PC.*



# GREY WATER SOLUTION

A PUMP FOR ALL YOUR GREY WATER NEEDS

**Ashland**  
P U M P

1899 COTTAGE ST. | ASHLAND, OH 44805  
855 281-6830 | ASHLANDPUMP.COM



# Break Free!

Drip solves many problems plaguing traditional drainfields.



## WaterflowPRO®

- Nano-Rootguard® keeps roots out
- Geoshield® lining stops bioslime
- 16mm tubing with cylindrical emitters



New!



## WaterflowECO®

- Geoshield® lining stops bioslime
- Tru17mm tubing with flat emitters
- Made in the USA



# Geoflow

800.828.3388 ■ [geoflow.com](http://geoflow.com)



# How Will YOU Honor SepticSmart Week?

The EPA's SepticSmart public education campaign is now in its 12th year. This year, commit to spreading the word about SepticSmart Week in your community.

Reach out to your local health regulators, realtors, newspapers, teachers, or government officials. Tell them that proper septic system care and maintenance can save money, safeguard health, and protect the environment. Then ask them to share the EPA's SepticSmart tips!

- Protect It and Inspect It!
- Think at the Sink!
- Don't Overload the Commode!
- Pump Your Tank!
- Don't Strain Your Drain!
- Shield Your Field!
- Keep It Clean!



[www.epa.gov/septic/septicmart](http://www.epa.gov/septic/septicmart)

## Proclamation

*WHEREAS*, proper septic system use and routine care are vital to protecting public health, preserving our highly valued groundwater, lakes, streams and waterways, and avoiding costly repairs that can result from neglect; and

*WHEREAS*, more than one in five households depend on septic systems to treat wastewater from homes and businesses; and

*WHEREAS*, wastewater professionals of NOWRA use their expertise in the design, installation, maintenance, research, outreach and/or regulation of septic systems in the U.S.; and

*WHEREAS*, the U.S. Environmental Protection Agency's SepticSmart program used by NOWRA does educate homeowners about the need for proper septic system use and routine maintenance; and

*WHEREAS*, homeowners and the environment benefit from properly designed, installed, operated, and maintained septic systems;

*NOW THEREFORE*, we the Board of Directors of the National Onsite Wastewater Recycling Association do hereby **proclaim the week of September 16-20, 2024 as SepticSmart Week** and we urge all people to join us in this special observance.



Signed this 15th day of July 2024

*Allison Blodig*  
NOWRA President

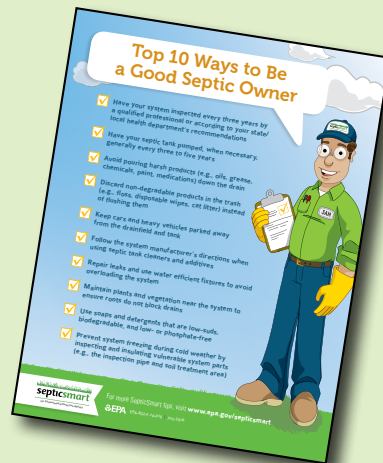
# Looking for new resources to share with the public?

## Check out NOWRA's Homeowner Education Course

This online training module is a more interactive way to learn about the basics of septic system operation and maintenance. It is a free resource, but users must create an account on [NOWRA's Online Learning Academy](https://www.nowra.org/online-learning-academy).

## Check out EPA's SepticSmart Resources

The EPA has many engaging SepticSmart materials for the public to use and disseminate, from videos and social media graphics to door-hangers for realtors and printouts for rental property guests. These resources can all be found at [www.epa.gov/septic/septicSMART](https://www.epa.gov/septic/septicSMART).



## About the EPA Decentralized MOU Partnership

For 20 years, NOWRA has been a proud member of the EPA's Decentralized Wastewater Partnership. The partners, which include other national organizations involved in the onsite industry, coordinate to improve decentralized wastewater treatment performance and protect the nation's public health and water resources.

The partners update and sign a Memorandum of Understanding every few years to renew our commitment to improving the decentralized industry. The MOU was recently signed and renewed in December 2023. Our current MOU priorities are:



- **Education & Outreach:** Increase public education and outreach through EPA's SepticSmart program to ensure septic/decentralized wastewater systems are properly used and maintained to protect water quality and human health.
- **Technical Assistance for Underserved/Disadvantaged Communities:** Promote technical assistance (TA) resources and foster connections between TA providers and underserved communities and tribes to support the design, construction, and financing of sustainable decentralized wastewater infrastructure.
- **Resiliency & Sustainability:** Showcase research, information and technologies that demonstrate how innovative approaches can help decentralized systems become more resilient to climate change and natural disasters, and sustainable for the long term.
- **Data Collection & Application:** Utilize federal and MOU partners' networks to collect, analyze and apply varying types of decentralized system data.
- **Workforce & Training:** Expand mechanisms to address the workforce and training needs in the decentralized wastewater industry.

# Using a Secondary Barrier

*Regulations and options for safety covers are increasing, and with good reason*

By Sara Heger, Ph.D.

The way industry professionals maintain onsite wastewater treatment systems can directly impact the safety and lives of people living nearby. Ensuring that manhole lids are secure and that the system includes a secondary safety device can protect health and save lives.

As an industry, having access to components such as septic and pump tanks and ATUs is necessary and facilitated by large-diameter manhole access at grade. Some regulations may still allow septic system manhole lids to be buried with 6 to 12 inches of soil, but the general regulatory trend has been to bring all components needing regular maintenance to grade. Unfortunately, too often a tragedy occurs in a tank when a child falls into the tank because the lid was damaged, not secured or missing. Improperly secured manhole covers, or damaged covers, pose a significant hazard to the public who typically does not understand the risk. A missing lid poses a risk to young people, who may inadvertently fall into the tank due to curiosity or misstep.

A vast majority of septic system codes and national standards require the lid be secured by:

- Weight (59 or more pounds)
- A twist lock cover which requires special tools for removal
- A hinge and hasp mechanism with corrosion-resistant fastener
- Bolted in base with tamper-resistant (nontypical) bolts or screws
- A lock, possibly a chain and padlock

---

*This article was first published by Onsite Installer in August 2024 and has been reprinted here with the permission of COLE Publishing.*

## Material matters

Manhole covers should be constructed of durable noncorrosive material and if exposed at the ground surface, also UV-resistant. Unfortunately, manhole covers typically made of concrete or thermoplastic can be damaged, not properly bolted or secured in place, or not replaced following maintenance. Heavy traffic over the system, landscaper damage, use of improper materials, incorrect installation and inappropriate replacement can all render a situation unsafe.

## Taking action

Due to the documented tragedies, Connecticut, Indiana, Kentucky, North Carolina, Texas, and some regional health districts in Michigan now require a secondary safety device under the manhole lid. Starting in September 2024, Oklahoma will require a riser safety screen as well. These requirements apply to septic tanks, ATU trash tanks, ATUs and all pump tanks. These requirements typically only apply to new systems, but installers and service providers should consider adding these to existing systems during repairs or service visits. There is currently no national standard in the U.S. requiring secondary barriers in septic system manholes. This is an item that could potentially be added to ASTM C1227 (concrete) and IAPMO/ANSI Z1000-2019 (concrete, fiber-reinforced polyester, thermoplastic). As an industry, we should support local and national efforts to prevent

tragedies through the addition of a simple, low-cost system component.

In Canada, the CSA Group develops and updates standards for many products including septic and holding tanks. In 2021, CBA B66:21 was updated to require a secondary safety device in all access openings larger than 8 inches. Except for Quebec, the provinces are implementing the requirement across Canada. The CSA B66 standard is cited in several U.S. regulations, including Maine, New Jersey, Oklahoma and Utah.

The secondary safety device is a device used in conjunction with risers as an additional protective measure to prevent accidental entry to septic system manholes. It is placed beneath the primary lid of the riser and provides an added barrier if the riser lid is not properly secured, replaced, damaged or malfunctions. The secondary safety device will prevent people and animals from falling through the lid into tanks. Safety barriers mitigate the danger by providing an added layer of protection against children, pets, and others from accidental or unauthorized access to tanks. It can be covered within a cover on the ground surface, or a device placed in the riser such as a screen or net.

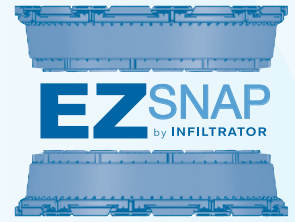
## Educate

When installing a new system, making a repair, or doing service work, demonstrate to homeowners how to check tank covers between service visits to make sure lids are in place, screws are securely fastened and there is no cover damage.

*continued on page 18*



# *This is what safety looks like ...*



## *Safety Star System*

### Prevent Unintended Entry into a Tank

Rated to withstand a minimum of 250 lbs.

Easy maintenance with quick installation and removal



*... and this is peace of mind.*



The structurally-reinforced Safety Star System is a strong secondary level of protection when used in a 24" EZsnap Riser System if a primary riser lid is unknowingly damaged or removed.

800-221-4436 • [www.infiltratorwater.com](http://www.infiltratorwater.com) • [info@infiltratorwater.com](mailto:info@infiltratorwater.com)

## Using a Secondary Barrier *continued*

If kids are on site, consider showing them what is inside to “take away the mystery,” explaining the risks associated with tank entry (e.g., deep liquid, poisonous gas) and give them respect for the dangerous environment. When working with safety nets and barriers it is important that the septic professional or property owner understands that protection from falling into the tank needs to be 100% of the time. If you walk away from a tank lid to get a

tool or part, protection from falling in must be placed before you leave.

Educational materials should be provided to property owners and include safety related information. [The NOWRA Onsite Wastewater Treatment System User Guide](#) can be **printed out or emailed to customers.**

Companies should educate workers as well on the risks associated with unsafe, unsecured or missing lids, and paperwork on site should include

clear reminders to check lid security one last time before leaving the site.

If an unsafe lid is observed when doing repairs or service work, it should be repaired or blocked off. Supplies such as safety tape and posts to block off the area should be on all service trucks along with material likely needed for lid repair and replacement. Safety related issues should never be listed as optional repairs. A \$50 repair could save a life.

**What’s available.** There are several great devices available for risk mitigation purposes and regardless of regulations, should be used when installing or repairing systems. Your supplier may have a locally available option or below are national options that could be integrated into new and existing systems.

**Infiltrator Safety Star system.** A fiberglass-reinforced screen which fits in the uppermost riser stack of Infiltrator 24-inch risers.

**Polylok Safety Screen.** A safety screen which is designed to fit into the uppermost rise stack of Polylok risers or with the 24-inch universal unit, it can be placed into PVC ribbed, HDPE corrugated and concrete risers. They also have a riser pan which allows a precast concrete tank manufacturer to pour a 59-pound concrete plug in the riser pan which sits at the base of the tank, which is then finished with a plastic cover.

**Norweco Safety Net.** A riser safety net made of polyethylene with 316 stainless steel hardware which can be installed in plastic and concrete risers up to 24 inches in diameter.

**Orenco Tank Shield.** A co-polymer polypropylene safety screen compatible with fiberglass-reinforced plastic and PVC-ribbed risers.

**Sim/Tech Filter Security Net.** Security net made of polypropylene attached with stainless steel eye bolts which can be placed in plastic or concrete risers.

**Tuf-Tite Safety Lids.** The plastic safety lid is designed to fit within the Tuf-Tite septic tank risers and lids. The safety lid is secured to the riser ledges using four stainless steel safety screws. For added safety, both the riser and safety lids can be filled with concrete.



*Infiltrator Safety Star system*



*Polylok safety screen*



*Norweco safety net*



*Orenco tank shield*



*Slim/Tech filter security net*



*Tuf-Tite safety lids*

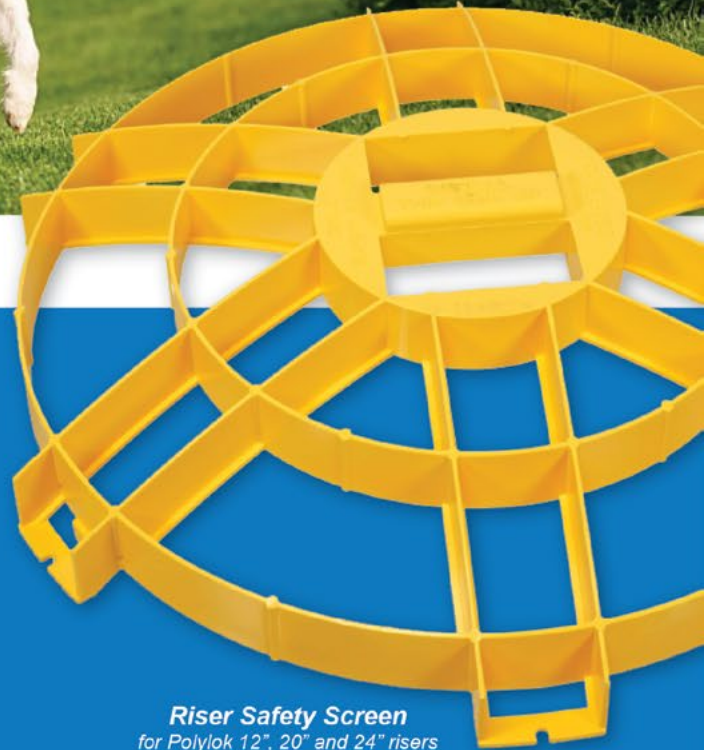
*Sara Heger, Ph.D., is a researcher and instructor at the University of Minnesota in the Onsite Sewage Treatment Program where she is faculty in the Water Resources Science program. She is the past president of NOWRA. Photos provided by Sara Heger.*



# POLYLOK™ Inc.

## Riser Safety Screens & Safety Devices *Reliable Protection for Peace of Mind!*

We take numerous precautions to protect ourselves and our loved ones in everyday life—whether it's wearing seatbelts in the car, helmets while biking, life vests on boats, or leashes for our pets. Yet, often the most overlooked safety hazards are right in our own backyards. Without proper precautions, your outdoor space can become a hidden danger for adults, children, and pets. Each year, there are tragic accidents involving children falling into unsafe septic tanks, often due to exposed tanks or unsecured and eroded lids. Prioritizing safety in your backyard is just as crucial as in any other aspect of life. *Protect What Matters Most!*



**Riser Safety Screen**  
for Polylok 12", 20" and 24" risers



**Universal Safety Screen**  
for 24" concrete, PVC ribbed, and corrugated pipe



**Lid-Lok**  
for Polylok 20" and 24" riser covers



**Dual Safety Cover**  
for Polylok 24" risers



**Riser Safety Pan**  
for Polylok 20" and 24" risers



Over the past four decades, Polylok has been at the forefront of innovation, providing top-quality solutions and exceptional service to our valued clients. This anniversary is a testament to the dedication and hard work of our incredible team, the loyalty of our customers, and the support of our partners. As we reflect on our achievements and growth, we look forward to continuing our legacy of excellence and embracing new opportunities for the future. Thank you for being a part of our story—here's to many more years of success together!



**WWW.POLYLOK.COM**

1-877-765-9565 / sales@polylok.com





# Onsite | 2024 Spokane, WA Wastewater Mega-Conference

Celebrating Tomorrow's Environment  
Clean Water for the Future



## OCTOBER 20-23, 2024 | SPOKANE, WASHINGTON

**Why Attend?** The 2024 Onsite Wastewater Mega-Conference is a collaborative effort between the National Onsite Wastewater Recycling Association (NOWRA), the National Association of Wastewater Technicians (NAWT), the State Onsite Regulators Association (SORA), the Washington On-Site Sewage Association (WOSSA), and the Oregon Onsite Wastewater Association (O2WA).

Now in its tenth year, the Onsite Wastewater Mega-Conference offers the highest quality education, training, and networking available to grow your career and business.

**There's something for everyone.** With multiple session tracks and onsite professionals from all across the nation, the Mega-Conference offers a wide range of options for meeting your education needs—regardless of your role or level of experience in decentralized wastewater treatment.

**You can fulfill your continuing education requirements.** In many states, the conference curriculum will qualify for credit hours in licensing or professional

certification programs. We are working to secure approval for continuing education credit from many states that license or certify installers, service providers, inspectors and designers.

**Tackle today's challenges and invest in your business.** The Mega-Conference is an ideal place for you to learn about today's wastewater challenges and identify new opportunities for your company to grow and expand.

Through education sessions and meetings with many of the industry's most progressive and innovative companies in the exhibit hall, you can get new ideas for building your existing business. And if you get one good idea which translates into more business or a better way to do things, you will more than justify your cost of attending.

**Network and have fun!** Take pride in the work you do to provide clean water and celebrate achievements with the rest of the onsite wastewater community. Take advantage of networking events, field trips, and the chance to visit a new part of the country all while building your career.

# MEGA-CONFERENCE HIGHLIGHTS



## Opening General Session

Hear from keynote speaker Brian Harding about “Creating Our Success in Tomorrow’s Clean Water Environment.” Raffael Stein (EPA) and Michele Brooks (USDA) will give updates on federal decentralized wastewater programs. Tim Perrin of Polsinelli, LLC will provide an analysis of the legislative and regulatory landscape, initiatives underway which may have an impact on the onsite industry, and steps the industry can take to increase its influence on Capitol Hill.

## Technical Education & Training

Choose from more than 60 sessions across a variety of topics, including policy/regulations, nutrients, soils, design, installation, business management, emerging issues, technology, and innovative solutions. A detailed agenda is available on NOWRA’s website.

## Exhibit Hall

Check out our busy expo hall to network with companies and learn about their latest technologies. Dozens of national and local companies will be exhibiting. Poster presentations will also be set up in the foyer.



## Three-Site Field Trip

We will be offering an optional full-day field trip on Wednesday. Pre-registration is required due to expected demand. We will visit Wilbert Precast, the Riverside Park Water Reclamation Facility, and Spokane's Waste to Energy Facility. [See details on next page.]

## Support Emerging Professionals

Join us Saturday afternoon for a golf tournament that will benefit NOWRA’s scholarship fund for emerging professionals. Consider attending our conference session about workforce development and investing in EPs. The Emerging Professionals Committee will also be hosting a 50/50 Raffle and a poster contest.

## Backhoe Roe-D-Hoe Contest

Compete in our popular Backhoe Roe-D-Hoe contest during conference breaks. Come prepared to test your skills!



## Social Event

On Monday evening, join your colleagues for hand-crafted food, beer, and cocktails while getting a feel for Spokane’s industrial past at the Steam Plant Restaurant & Brew Pub. Built in 1916, the Central Steam Heat Plant operated for 70 years, providing heating for more than 300 buildings in the city of Spokane. The Steam Plant, which is now on the National Register of Historic Places, has been carefully renovated for dining and entertainment while showcasing the original machinery. Other features include a game room, outdoor patio, and opportunities to explore the old smokestacks. Attendance is optional and pre-registration is required.





## FIELD TRIP DETAILS

### Stop 1: Wilbert Precast, Inc.

A great opportunity to tour a precast concrete plant that manufactures products for the onsite wastewater treatment industry and much more.

Wilbert Precast Inc. in Spokane, WA has been manufacturing precast products for over 100 years. Founded in 1906, Wilbert first focused mainly on burial vaults. Production then expanded to include septic tanks and other onsite wastewater structures.

Today, Wilbert has three locations in Washington and Idaho and additionally manufactures sewer manholes, utility vaults, retention walls and many other specialized products. Come tour this great facility to learn how quality precast concrete septic tanks are manufactured.

### Stop 2: Next Level Treatment, Riverside Park Water Reclamation Facility

Spokane's Riverside Park Water Reclamation Facility is located within the boundaries of Riverside State Park.

It has evolved over 65 years. The original plant, built in 1958, had a primary treatment system that met the standards of that time. In 1977, the facility was upgraded to provide advanced secondary treatment for 44 million gallons of sewage per day, along with primary treatment for 77 million gallons of stormwater. These enhancements increased the facility's capacity to handle peak hourly flows up to 146 million gallons in a 24-hour period.

The most recent facility modification introduced advanced tertiary treatment with membrane filtration to remove fine particles and further reduce pollutants before releasing the treated water into the river. This state-of-the-art tertiary step provides next level treatment.

This upgrade has increased the removal of phosphorus from the effluent to more than 99 percent, from 90 percent. Phosphorus has been associated with low oxygen levels and algae blooms in Lake Spokane that can harm aquatic life. The system also removes greater amounts of heavy metals, PCBs, and other pollutants.

### Stop 3: Spokane's Waste to Energy (WTE) Facility

Spokane's Waste to Energy (WTE) Facility is part of our community's overall comprehensive solid waste system—encouraging recycling and waste reduction in addition to energy recovery.

The facility burns municipal solid waste to recover energy in the form of electricity and handles 800 tons of MSW a day. The facility generates approximately 22 megawatts of electricity, enough to power 13,000 homes, and earns up to \$5 million in power sales annually.

There are 76 WTE facilities in the U.S. that process nearly 94,000 tons of MSW per day producing 2.5 GW of electricity and 2.7 GW of combined heat and power. This equates to approximately 13% of all MSW generated in the U.S. and powers 2.3 million homes.

The current performance of WTE facilities in the U.S., and globally, shows their emissions are more than 70% below Maximum Achievable Control Technology (MACT) standards, except for NO<sub>x</sub>, which operates at approximately 35% below emission standards. WTE plants currently recover nearly 700,000 tons of ferrous metal for recycling annually, which avoids CO<sub>2</sub> emissions and saves energy compared to the mining of virgin materials for manufacturing new metals. This process reduces the volume of solid waste by 90%–70% by weight. The resulting ash is biologically inert and sent to a regional landfill to be used as alternative daily cover.

**Early Bird Registration Ends September 22!**  
**Register NOW!**



# NPCA

National Precast Concrete Association

Silver Corporate Member | NOWRA

## We serve precast concrete manufacturers & suppliers.

The National Precast Concrete Association's mission is to provide industry leadership by promoting quality precast concrete products across all markets, addressing industry challenges and developing opportunities for our members' success.

## PRECAST PROUD

Visit Us at the  
Onsite Wastewater Mega-Conference



### ACCESS PRECAST RESOURCES AT PRECAST.ORG

#### Find A Precaster

Easily find NPCA Members that specialize in septic tanks, gravity grease interceptors, treatment systems, storage products and more!



#### Technical Expertise & Support

#### Advocacy & Regulatory Updates

#### Wastewater Resources

Find the latest standards & practices, product information, septic tank resources, wastewater homeowners manual and ASTM guides.

#### Education & Training

- On topics such as
- Installation
- Water Tightness
- Inspection
- And much more ...

## UPCOMING EVENTS

### PRECAST DAYS 2024 OCTOBER

The annual event where precast concrete manufacturers provide their local communities with an up-close experience at a precast concrete plant.



[precastdays.org](https://precastdays.org)



### Indianapolis • Feb. 5-7, 2025

The Precast Show is the largest North American trade show for the precast concrete industry.



[ThePrecastShow.com](https://ThePrecastShow.com)



# MEGA-CONFERENCE SCHEDULE

## Saturday, October 19

1:00 pm–5:00 pm Emerging Professionals  
Scholarship Golf Tournament

## Sunday, October 20

11:00 am–5:00 pm Registration Open  
1:00 pm–5:00 pm Exhibitor Move-in  
12:00 pm–5:00 pm NOWRA Board of  
Directors Meeting  
6:00 pm–8:00 pm Welcome Reception

## Monday, October 21

7:00 am–5:00 pm Registration Open  
7:15 am–8:00 am Government Relations  
Committee Meeting  
8:00 am–12:00 pm Opening General Session  
12:00 pm–1:30 pm Lunch Break in Exhibit Hall  
12:00 pm–1:30 pm State Affiliates  
Committee Meeting  
12:00 pm–1:30 pm Joint Tech Practices/  
Education Committee Meeting  
1:30 pm–4:45 pm Concurrent Education Sessions  
4:45 pm–6:00 pm Exhibit Hall Reception  
6:30 pm–9:30 pm Offsite Social Event  
(Pre-registration Required)

## Tuesday, October 22

7:00 am–4:30 pm Registration Open  
7:00 am–1:00 pm Exhibit Hall Open  
8:00 am–11:30 am Concurrent Education Sessions  
11:45 am–1:00 pm Lunch Break in Exhibit Hall  
11:45 am–1:00 pm Emerging Professionals  
Committee Meeting  
1:00 pm–4:30 pm Concurrent Education Sessions  
1:00 pm–6:00 pm Exhibitor Move-out  
5:00 pm–6:30 pm NOWRA Annual Business  
Meeting & Reception  
6:30 pm–8:30 pm SORA Reception (Invitation Only)

## Wednesday, October 23

8:00 am–4:00 pm Optional Field Trip  
(Pre-registration Required)

**Backhoe Roe-D-Hoe and the poster session will also be happening Monday and Tuesday.**

[A detailed agenda is available on our website.](#)

*We look forward to seeing you in Spokane!*





# Get Ahead New NSF/ANSI 350 Criteria

**Demand for water reuse is growing and state onsite water reuse regulations are trending toward adopting risk-based methodologies.**

NSF/ANSI 350 has been updated to include criteria that incorporates a risk-based framework using log-reduction targets (LRTs) and log-reduction credits (LRCs).

The updates are aligned with the recommendations from the National Blue-Ribbon Commission on Onsite Non-Potable Water Systems

Certification to NSF/ANSI 350's newly added criteria reduce the burden of expensive continuous sampling for viruses and protozoa by the end user while ensuring systems work as designed and protect public health.

New criteria are applicable to commercial and multi-family systems only and passing any previously existing NSF/ANSI 350 test requirements is a prerequisite.



**Celebrating 80 Years  
of Improving Human  
and Planet Health**

[NSF.ORG](https://www.nsf.org)



# VISITING SPOKANE

We are excited to be in Spokane during the city's 50th anniversary of hosting the World's Fair.

Once a mill city and later a hub for railway transportation, Spokane now boasts a beautifully revitalized downtown with the powerful Spokane River at its center. Much of that revitalization was achieved when Spokane hosted the World's Fair in 1974, four years after the first Earth Day celebration and just two years after the passage of the Clean Water Act.

Spokane was, at the time, the smallest city to host the World's Fair and was the first to infuse the traditionally technological exposition with a reflection on our relationship with nature. The theme of Expo '74 was "Celebrating Tomorrow's Fresh New Environment."

The city opened the fair by releasing trout into the Spokane River, commemorating efforts to restore the river

after decades of industrial pollution. The fair was held in the heart of the city in what is now the beautiful Riverfront Park, attracting more than 5 million visitors from around the world.

As a tribute to Spokane's history, the theme for this year's Onsite Wastewater Mega-Conference is "Celebrating Tomorrow's Environment: Clean Water for the Future." We invite you to reflect back on the progress we've made to protect our water resources over the last 50 years, and to envision the next 50 years for the onsite industry.

In addition to visiting Riverfront Park, you may also want to check out the Expo '74 exhibit at the Northwest Museum of Arts and Culture. The Visit Spokane website ([visitspokane.com](http://visitspokane.com)) has many ideas for enjoying your stay, including dozens of restaurants and bars to choose from and other interesting city sights.

Photos courtesy of the city of Spokane ([VisitSpokane.com](http://VisitSpokane.com))





# EXPERIENCE THE IMPERIAL ADVANTAGE

At IMPERIAL INDUSTRIES, we have been going the extra mile designing and manufacturing specialized commercial sanitation tanks for more than 43 years - constantly evolving to meet the changing needs of your industry. It is our mission to provide you, our valued customers, with dependability for the road ahead.

## WE DO IT ALL

- Vacuum Tanks
- Grease Units
- Dump Trucks
- Slide-Ins
- Hydraulic Hoist Tanks
- 407/412 DOT Tanks
- Portable Restroom Service Units

## THE IMPERIAL WAY

- ✓ Quality
- ✓ Durability
- ✓ Innovation
- ✓ Customer Support

Better efficiency means bigger profits. Let us help you get the results you want!



**IMPERIAL INDUSTRIES** INC

Call Our Team Today!  
**1-800-558-2945**

IMPERIALIND.COM  
SEPTICTRUCKCENTER.COM  
SALESINFO@IMPERIALIND.COM



# Learning Just Got SIMPLE!

## Online Courses to Meet Everyone's Needs

NOWRA's Online Learning Academy makes it easy for you to obtain high quality onsite wastewater training by bringing the classes to you! It's a great option when:

- you are unable to attend in-person training events,
- you want to train new employees quickly,
- you are a few CEUs short for professional license renewal, or
- you need to better understand onsite wastewater fundamentals.

Our suite of courses has been developed by respected industry professionals from academia, engineering, soil science, and contracting. Each course offers a dynamic mix of classroom lectures, external videos and required readings, along with periodic tests of your knowledge. When you pass a course, you get a personalized Certificate of Completion, which can be used as continuing education documentation.

### ▶ **Onsite A to Z**

An overview of onsite wastewater treatment provides a foundation of relevant courses for many professionals.

### ▶ **Installer Training**

Ideal for new installers, those preparing for a certification exam, or those looking to brush up on skills.

### ▶ **Troubleshooting**

Step-by-step component troubleshooting—for designers, installers, regulators, service providers and more!

### ▶ **Design Courses**

These courses lay the groundwork for design and are continuously being expanded with new additions.

### ▶ **Technical Sessions**

These courses cover a wide variety of topics and were selected for their continued relevancy to the decentralized industry.

*22 new courses added in November 2023!*

## TWO New Business Resources Added!

**1** We now have a FREE online business course for members of NOWRA and our affiliates. ***Building & Running a Quality Business*** is an approximately 40-minute course that discusses how to better run a small onsite wastewater business. It was developed by NOWRA past-present Tom Fritts of Residential Sewage Treatment Company.

This FREE course is available only for members of NOWRA and our affiliates, under “Business Courses” on the main menu of our Online Learning Academy.

**2** We’ve also posted our recent webinar, ***Insurance Costs and Risk Management for the Onsite Wastewater Industry***. Hosted in partnership with WaterColor Insurance Management, this presentation shares ways you can get the best coverages for your business, with a focus on the different kinds of liability insurance most relevant to the onsite industry.

*More business courses will be added to the Online Learning Academy in the future.*

Participants can select class length based on continuing education requirements, the subject matter, or how much time they have to commit to training.

Sign up today!

[www.pathlms.com/NOWRA](http://www.pathlms.com/NOWRA)



Scan for more info

## THE MOST COMPETITIVE ON-SITE WASTEWATER INSURANCE

Tailored Liability and Property Insurance  
for Septic Design, Maintenance and  
Installation

CONTACT US  
(855) 929-0824  
[RHONDA@WATERCOLORMANAGEMENT.COM](mailto:RHONDA@WATERCOLORMANAGEMENT.COM)



# NOWRA CORPORATE MEMBERS

National Onsite Wastewater Recycling Association

## Diamond Level



## Gold Level



## Silver Level

BioMicrobics, Inc.

Ecological Tanks

National Precast Concrete Association (NPCA)

Orenco Systems

Polylok

Bronze Level	Copper Level	Pewter Level
--------------	--------------	--------------

Clearstream Wastewater Systems, Inc.  
 Geoflow  
 Hoot Systems, LLC  
 Netafim USA  
 Roth Global Plastics  
 WaterColor Insurance Management  
 Wieser Concrete

Ashland Water Group  
 JMN Technologies, Inc./LWRE  
 FujiClean USA  
 Hiblow USA, Inc.  
 Residential Sewage Treatment Company

Arris Water Treatment & Technology  
 Imperial Industries  
 Inspector Cameras, LLC  
 NSF International  
 Premier Tech Water & Environment  
 RioVation  
 SJE Rhombus  
 SludgeHammer Group, Ltd.

To learn more about or to join NOWRA's Corporate Membership program, please contact us at 978-496-1800, by email at [info@nowra.org](mailto:info@nowra.org), or on our website at [www.nowra.org/about/corporate-members](http://www.nowra.org/about/corporate-members).

## CORPORATE MEMBER BENEFITS

Corporate Membership in NOWRA is an investment that enhances your business marketing efforts while showing your support of our mission to advance and grow the onsite and decentralized wastewater industry.

### Corporate Membership Benefits

- Conference booth, sponsorship, & advertising discounts
- *Onsite Journal* advertising discounts
- Individual NOWRA memberships
- Recognition in the industry
- Federal advocacy on your behalf

### Advocacy Successes

1. NOWRA worked with Congress on the Infrastructure Investment and Jobs Act (H.R. 3684) that was signed into law by President Biden on November 15, 2021. The water infrastructure bill creates a Decentralized Wastewater Grant Program for the repair or replacement of failing or non-existent septic systems owned by low-income homeowners. The Act authorizes \$50 million of funding for each of the Fiscal Years 2022–2026, for a total of \$250 million.
2. NOWRA is working with EPA on implementation of legislation we sponsored which was passed into law as part of the 2018 Water Bill (America's Water Infrastructure Act of 2018) requiring EPA to create a Decentralized Technology Clearinghouse and to share information about the cost-effectiveness of decentralized systems with local governments and other groups. EPA must regularly report back to Congress about how they are supporting the increased use of decentralized systems.
3. NOWRA is monitoring the U.S. Census Bureau's efforts to include a "sewer or septic" question added to the Annual American Community Survey (ACS). This question was removed from the decennial Census after 1990. NOWRA worked with EPA to get them to submit a request to have this question included on the survey. In October 2018 the U.S. Census Bureau accepted the EPA proposal and the question is moving forward to the next stage of approval. This is on track for addition to 2026 ACS.

## INDUSTRY NEWS

### Acquisition of Advanced Wastewater Treatment Leader Orenco Systems, Inc.

**Hillard, Ohio – August 20, 2024** – Advanced Drainage Systems, Inc. (NYSE: WMS) ("ADS" or the "Company"), a leading provider of innovative water management solutions in the stormwater and onsite septic wastewater industries, today announced the signing of a definitive agreement pursuant to which the Company's wholly-owned subsidiary, Infiltrator Water Technologies ("Infiltrator"), will acquire Orenco Systems, Inc. ("Orenco"), a leading manufacturer of advanced onsite septic wastewater treatment products serving residential and non-residential end markets. The parties expect the transaction to close in the Company's third quarter of fiscal 2025, subject to customary closing conditions.

"Orenco accelerates the Company's growth in the advanced wastewater treatment space, opening up new opportunities in a highly fragmented and fast-growing segment of onsite septic wastewater," said Scott Barbour, President and Chief Executive Officer. "This acquisition is a great strategic fit for the Infiltrator business. The enhanced portfolio of complementary solutions combined with the broader sales force, geographic reach and distribution footprint will drive further penetration in this attractive segment. We look forward to working with the Orenco team to continue building on both companies' strengths to deliver exceptional products and services to customers."

**About Advanced Drainage Systems.** Advanced Drainage Systems is a leading manufacturer of innovative stormwater and onsite septic wastewater solutions that manages the world's most precious resource: water. ADS and its subsidiary, Infiltrator Water Technologies, provide superior stormwater drainage and onsite septic wastewater products used in a wide variety of markets and applications including commercial, residential, infrastructure and agriculture, while delivering unparalleled customer service. The Company is one of the largest plastic recycling companies in North America, ensuring over half a billion pounds of plastic is kept out of landfills every year. Founded in 1966, ADS' water management solutions are designed to last for decades. To learn more, visit the Company's website at [www.adspipe.com](http://www.adspipe.com).

**About Orenco.** Orenco is a leading manufacturer of advanced wastewater treatment products serving residential, commercial and municipal end markets. Since 1981, Orenco Systems, Inc. has designed and manufactured innovative onsite and decentralized wastewater collection and treatment technologies. Orenco solutions include community collection systems, advanced treatment systems, water-tight fiberglass tanks, and in-tank pumping and filtration systems. Orenco also manufactures OEM controls, as well as state-of-the-art fiberglass buildings, tanks, and enclosures.

# TAKE ADVANTAGE OF DISCOUNTS THROUGH



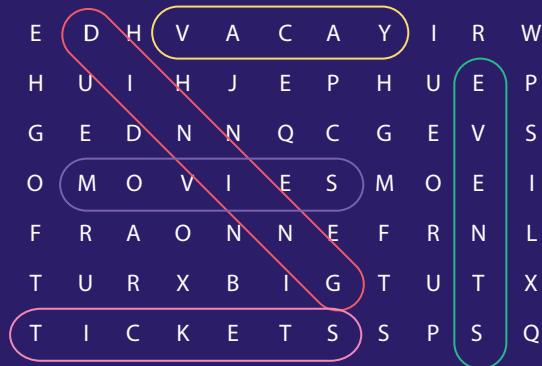
NOWRA has been working hard to find new ways to support our small business members.

We are pleased to be able to offer a new program through BenefitHub that will provide discounts on commonly used items. This will include discounts for work clothing, travel, computers, cell phones, and much, much more!

**Follow the instructions below to access the site and sign up today to start saving!**



## Searching for savings? Look in new directions.



Discover your new benefits. They're everywhere.



Save on  
getaways



Shop around  
a little



Be healthy  
and wealthy

Scan the code



1

Go to: <https://nowra.benefithub.com>

2

Enter Referral Code: XZ9LSD

3

Sign up and Start Saving!!!

Questions? Call 1-866-664-4621 or email [customer care@benefithub.com](mailto:customer care@benefithub.com)



ADVANCED  
**ENVIROSEPTIC™**

**Passive Onsite Wastewater  
Treatment Systems**

**COMBINED TREATMENT AND DISPERSAL**



- **Treats and disperses wastewater in the same footprint.**
- **No electricity, replacement media or maintenance required.**
- **Flexible configurations for sloped or curved sites.**

The Advanced Enviro-Septic® (AES) Treatment System has been proven to remove up to 99% of wastewater contaminants without using any electricity or replacement media.

[www.infiltratorwater.com](http://www.infiltratorwater.com) • [info@infiltratorwater.com](mailto:info@infiltratorwater.com) • (800) 221-4436



**INFILTRATOR**  
water technologies





# CLEARSTREAM®

WASTEWATER SYSTEMS, INC.

RESIDENTIAL • COMMERCIAL • INDUSTRIAL

When  
Experience  
Counts...



AEROBIC WASTEWATER  
SYSTEMS...

Exceeds Requirements for NSF/ANSI  
Standard 40 Class 1, 245, and 350

[www.clearstreamsystems.com](http://www.clearstreamsystems.com)

## WHY Clearstream® Wastewater Systems?



CLASS 1  
NSF/ANSI 40  
245 & 350

### PERFORMANCE

Clearstream Wastewater Treatment Systems have been tested and certified to meet NSF Std 40, 245 and 350. You can count on the best quality in your Clearstream product.



### SIMPLICITY

Our systems consistently produce the highest water quality in the most efficient way possible. Built with serviceability in mind for ease of maintenance.



### COMPONENTS

Aerators, control panels, pumps, and accessory equipment from Clearstream are manufactured to strict guidelines—reliable components offered at a reasonable price.



1-800-586-3656



## Online Learning Academy

## Your Online Source for Continuing Education

*Over 50 Courses in the Following Areas:*  
Onsite Wastewater A-to-Z • Installer Training  
Troubleshooting • Design Courses  
Technical Sessions



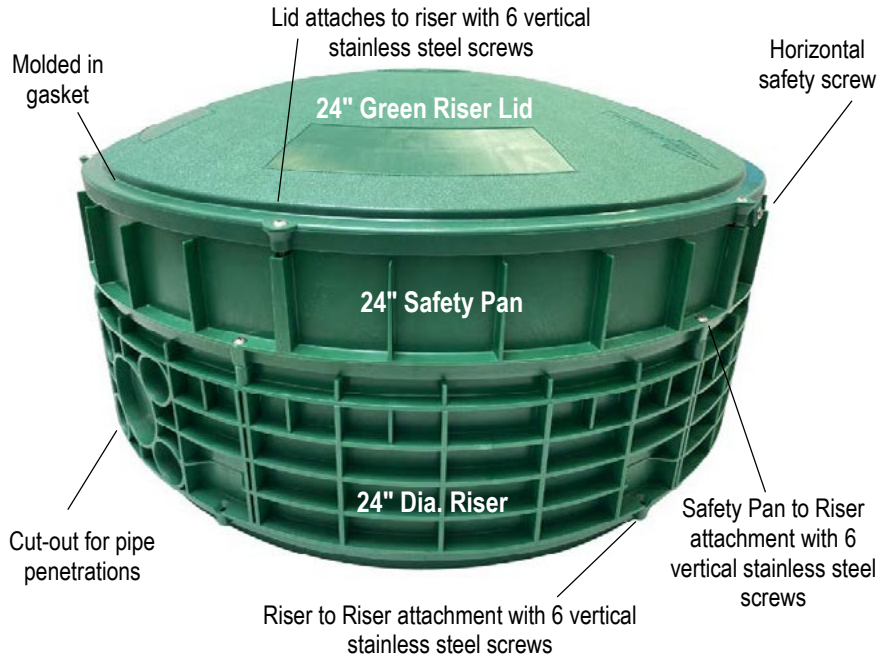
**NOWRA and State Affiliate Members GET THE LOWEST RATE!**

Visit [www.nowra.org/education](http://www.nowra.org/education) for a full class list and descriptions.

PO Box 982, Westford, MA 01886 • (978) 496-1800 • [info@nowra.org](mailto:info@nowra.org)



### Tuf-Tite Riser System



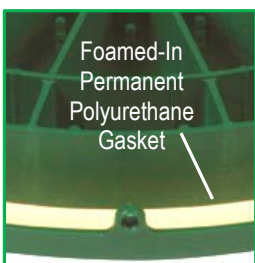
Risers	12"x6"	16"x6"	20"x6"	24"x6"
	12"x12"	16"x12"	20"x12"	24"x12"



Safety Lids	12"	16"	20"	24"
-------------	-----	-----	-----	-----



Visit [Tuf-Tite.com](http://Tuf-Tite.com) to review our 12", 16", 20", & 24" Dia. System Components



All Tuf-Tite Riser Lids can be Filled with Concrete for Added Safety.

(24" Lid) Holds up to 70 lbs of Concrete





National Onsite Wastewater Recycling Association

**P.O. Box 982**

**Westford, MA 01886**

No longer want to receive a print version of *The Onsite Journal*? Send a message to [info@nowra.org](mailto:info@nowra.org), and we will remove you from our mailing list.

**View Journal Online!** You can find this edition and back issues of *The Onsite Journal* on [NOWRA's website](#).



# AMERICAN

*Manufacturing Company, Inc.*

Visit the “Updated”, “Revamped”, and “Relaunched”  
**[www.americanonsite.com](http://www.americanonsite.com)**

Everything you'll ever need for your Onsite and  
Decentralized Wastewater project.

**Controls for Water  
& Wastewater Systems**



**Perc-Rite® Drip  
Dispersion Systems**



**Septic & Onsite Products**



**1-800-345-3132**