

PENNSYLVANIA WATER ENVIRONMENT ASSOCIATION ANNUAL TECHNICAL CONFERENCE & EXHIBITION

PennTec 2025 CONFERENCE PROGRAM

June 22-25, 2025 | Kalahari Resort & Convention Center Pocono Manor, PA



Manufacturer's Representative Water and Wastewater Industry



717-761-7884 • sales@envirep.com • www.envirep.com

WHY CHOOSE ENVIREP?

Comprehensive Product Solutions Experienced Team Full Lifecycle Support Trained Service Professionals Proactive Maintenance Programs Customer-Centered Approach





Serving the Mid-Atlantic Region for over 40 years!

Envirep covers Eastern and Central Pennsylvania, Southern New Jersey, Maryland, Delaware, the District of Columbia, Northern Virginia, and part of West Virginia.

FLEXIBILITY IS ONLY ONE ADVANTAGE OF OUR CLOSED LOOP REACTOR PROCESS.

We have more than 60 years of experience in oxidation ditch technology and more than 2000 installations. Lakeside's CLR process offers a variety of wastewater treatment options, including several operational modes, nitrogen and phosphorus removal, and an adaptable configuration, providing maximum flexibility with consistently high quality effluent. The CLR process is simple to operate and can be configured in several shapes, including the conventional racetrack, folded U-shape or concentric multichannel designs. Lakeside's staff delivers full service from initial concept through construction to plant operation. The result: reliable results with minimal operator attention and maintenance. When performance counts, count on the industry leader for more than 90 years!

REPRESENTED LOCALLY BY:



754 Kittanning Hollow Road East Brady PA 16028 T: 724.526.5714 | F: 724.526.5277 jcurran@damansuperior.com www.damansuperior.com



P.O. Box 107 Harleysville, PA 19438 T: 215.256.8430 | F: 215.256.8567 dave@pyrzwater.com www.pyrzwater.com



Cleaner Water for a Brighter Future®

Speak to one of our experts at 630.837.5640, email us at sales@lakeside-equipment.com, or visit www.lakeside-equipment.com for more product information.

CLR Process Components

Magna Rotors Velocity Control Baffles Rotor Covers Level Control Weirs E.A. Aerotor Process Monitoring and Control Systems



Kevin Cosman 201.394.1893 Central-Northern NJ

Chris Reiner 973.347.9000 Lower NY State & Sussex

Gregg Sermarini 717.710.8570 E. Pennsylvania

How Can We Help?

HD WW pumps & controls IN-STOCK

Call 973.347.9000 or Click reinerpump.com





Keith Thompson 973.229.0122

NYC Metro

Philadelphia Metro

COSTARS MAN

Craig Reiner

215.909.0082

Performance in the Industry. Premium Efficient Motors.





PVSC Co-Op Approved Vendor

HST[™] high speed turbocompressor. Magnetic Bearings. More flow and pressure at higher efficiency.





Best Progressive Cavity Pumps On The Market. Pulse-Free Chemical Metering Pumps and Skids







ИΒІ

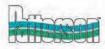
Vertical Turbine Pumps. Axial and Mixed Flow Pumps. HD split Case Pumps. Johnston Pumps founded 1909.





Packaged Pump Stations for Water and Wastewater. Turnkey Solutions/Single Point Responsibility. Complete UL Packages.





pattersonpumps.com

Horizontal Split Case Pumps. Axial and Mixed Flow Pumps. Double Disc Gate Valves.





Packaged Water Booster Systems. NSF 61 Approved Systems. Quick Delivery.



IARDY PRO-AIR

hardyproair.com High-End, engineered, custom-built blower packages to fit your application. Sound attenuated enclosures. Direct drive/VFD or belt. Quick delivery.



🚯 Franklin Electric

franklinengineered.com Grinder Pump Systems. VMS and Booster Systems. Heavy Duty Water and Waste Water Pumps



pioneerpump.com leavy Duty Self-Priming Pumps. Portable Gas, Electric, and Diesel. Patented Pioneer Prime System.



oes for the Bette mitsubishielectiric.com Heavy Duty VFD's to 600hp. IN-STOCK





nationalpumpcompany.com Vertical Turbine Pumps. Custom Engineered and Standard Products. Submersibe Turbine Pumps.

Other Products Available



Davco[™] Envirex[®]

Wastewater treatment solutions and services

Kappe Associates,Inc. is excited to announce that we are now representing Xylem's Envirex[®] and Davco[™] brands for water and wastewater treatment applications in the State of Pennsylvania. This partnership will provide even more innovative solutions and services to help meet the most challenging treatment requirements.

Xylem through the DAVCO and Envirex brands have more than 100-years of clarification and separation, biological wastewater treatment, filtration and anaerobic digestion equipment.

For more information, contact:

Now Locally Represented by Kappe Associates, Inc. Tel: 301-846-0200 Email: info@kappe-inc.com kappe-inc.com



FL@MATIC[®]VALVES



UNMATCHED CUSTOM CONTROL

Engineered Excellence in the USA for Nearly a Century

SCAN FOR AR VIEW

At Flomatic[®] Valves, we specialize in designing and manufacturing Automatic Control Valves that are uniquely tailored to your water system needs. Each Flomatic[®] Valve is custom-built on demand, ensuring it meets the precise requirements of your potable water applications.

Seamlessly integrating with pressure and electric controls, our valves ensure unmatched precision in flow control.

- CUSTOM DESIGNED: Made to order based on your specific requirements
- RELIABLE: Backed by a 3-year warranty
- AMERICAN MADE: Engineered, forged, & built in the USA
- HIGH QUALITY: Manufactured & certified under ISO 9001 &14001 quality and environmental systems

Experience Versatility and Efficiency with Flomatic's Automatic Control Valves.



A part of Flomatic's American-made line of valves for water & wastewater applications. Contact us for your AIS & BABA Projects.



WWW.FLOMATIC.COM 15 Pruyns Island Drive, Glens Falls, NY 12801



Table of Contents

	Conference at a Glance	8
	A Message from PWEA Leadership	10
	Keynote Presentation	12
	Special Events	14
and the second of the	Professional Development Hours and Tracking	
1.8.18	Technical Program Details	33
	Certification	
	Workshop Details	48
	Exhibit Hall Information	50
	Exhibitor Listings	55
Contraction of the second	PennTec Sponsors	62
	Raffle Draw	64
	Student Research	66
	Committees	70
	PWEA Information	72
	PennTec 2026	73
	Call for Abstracts	



QUESTIONS?



......74

If you have questions about PWEA, please contact the PWEA Administrative Office at

717-642-9500 or by email at pwea@pwea.org.

Conference at a Glance



SUNDAY, JUNE 22		9:45am-10:15am	Exhibit Hall Open with Break Refreshments Kilimaniaro Ballroom
1:00pm	Annual Golf Tournament Pocono Manor Golf Course	12:00pm-1:00pm	Exhibit Hall Open with Complimentary Lunch Kilimanjaro Ballroom
11:00am-3:00pm	Community Service Project Kettle Creek Environmental Education Center	12:30pm-1:00pm	PWEA Annual Business Meeting with Dessert & Coffee
4:00pm-5:00pm	Registration Opens Registration 1	12.55	Salon H
5:30pm-7:30pm	Vendor Get-Together at	12:55pm-1:00pm	5-Minute Vendor Presentations
0.0000000000000000000000000000000000000	Redd's Piano Bar	1:00pm-3:30pm	Professional Operators (PO) Plant Tour
	www.kalahariresorts.com/pennsylvania/ things-to-do/dining/redds-piano-bar-and-lounge with Exhibits & Sponsors Committee	1:00pm-4:45pm	Afternoon Technical Programs Biosolids – African Ballroom Suite 20 Collection Systems – Salon D Engineering & Construction – Salon C
MONDAY, JU	NE 23		 Stormwater – Salon A Utility Management & Government Affairs
7:00am-5:00pm	Registration Opens Registration 1	2:40pm-3:40pm	- Salon B Exhibit Hall Open with Break Refreshments
7:00am-8:00am	Continental Breakfast		Kilimanjaro Ballroom
7:30am-8:30am	Kilimanjaro Ballroom Keynote Presentation Kilimanjaro Ballroom	3:40pm-4:45pm	Collection Systems Mobile Sessions in Exhibit Hall Kilimanjaro Ballroom
8:40am-11:30am	Morning Technical Programs Biosolids – African Ballroom Suite 20 	4:45pm-5:45pm	President's Reception in Exhibit Hall Kilimanjaro Ballroom
	 Collection Systems – Salon D Engineering & Construction – Salon C 	5:45pm-7:00pm	Annual PWEA Awards Ceremony Kilimanjaro Ballroom
	 Stormwater – Salon A Utility Management & Government Affairs Salon B 	7:15pm-9:30pm	Tailgate Dinner and Cornhole Tournament River Ballroom and Patio
	Workshops		
8:00am-5:00pm	Activated Sludge Refresher Course – Day 1 of 2		

8:45am-12:00pm

• Activated Sludge Refresher Course – Day 1 of 2 African Ballroom Suite 30

 Laboratory Practices Committee Workshop African Ballroom Suite 40

TUESDAY, JUNE 24 • Collection Systems - Salon D 7:00am-5:00pm **Registration Opens** • Engineering & Construction - Salon C Registration 1 • Drinking Water – Salon B 7:30am-8:30am Exhibit Hall Open with Continental Breakfast • IW Pretreatment – Salon A Kilimanjaro Ballroom Artificial Intelligence – African Ballroom Suite 20 7:55am-8:00am 5-Minute Vendor Presentations • Student Research Podium Presentations 8:00am-11:45am **Morning Technical Programs** – African Ballroom Suites 50 & 60 • Collection Systems - Salon D • Engineering & Construction – Salon C 2:40pm-3:40pm Exhibit Hall Open with Break Refreshments • Utility Management & Kilimanjaro Ballroom Government Affairs – Salon B • IW Pretreatment – Salon A 4:45pm-5:45pm Beer & Pretzels/Wine & Cheese • Artificial Intelligence -Reception in Exhibit Hall African Ballroom Suite 20 Kilimanjaro Ballroom Workshops 4:45pm-5:45pm Operator Olympics in Exhibit Hall 8:00am-11:45am • Responsibilities of Clean Water Kilimanjaro Ballroom Professionals "Operator Ethics" – African Ballroom Suites 40 8:00am-5:00pm Activated Sludge Refresher Course WEDNESDAY, JUNE 25 - Day 2 of 2 - African Ballroom Suite 30 7:00am-8:30am Continental Breakfast Exhibit Hall Open with Break Refreshments 9:40am-10:40am Salon H Kilimanjaro Ballroom 7:00am-12:00pm **Registration Open** 11:45am-1:00pm Exhibit Hall Break with Complimentary Lunch **Registration 1** Kilimanjaro Ballroom 7:55am-8:00pm 5-Minute Vendor Presentations 11:45am-1:00pm Student Research Poster Presentations Kilimanjaro Lounge 8:00am-11:15am **Morning Technical Programs** Engineering & Construction 11:45am-1:00pm Women in Water Luncheon - Salon H – Salon C 12:55pm-1:00pm 5-Minute Vendor Presentations Workshops 8:00am-11:30am • Solids Handling & Disposal – Salon B

1:00pm-4:45pm

8:00am-11:30am

9:00am-1:00pm

9:40am-10:10am

11:30am

Afternoon Technical Programs

Excavation and Trenching Refresher

PA DEP Water/Wastewater **Operator Certification Exam** Rosewood & Sagewood Rooms

Aloeswood & Ironwood Rooms

Break Refreshments

Conference Concludes

– Salon A

A Message from PWEA Leadership

On behalf of the PWEA Board of Directors and the 2025 Conference Committee, we invite you to attend PWEA's 96th Annual Technical Conference and Exhibition (PennTec 2025) on June 22-25 at the Kalahari Resort & Convention Center in Pocono Manor, PA.

This year's Conference Program includes a wide range of topics related to water quality. In addition to the Conference technical sessions, we are also presenting workshops which have been approved by the PA DEP for additional contact hours for water and/or wastewater operator licenses. By attending these workshops, you could earn **up to 19.0 DEP Contact Hours, or up to 19.0 Continuing Education Hours,** in just a few days!

A very important part of the Conference is the vendor exhibition. By visiting the exhibits, you will gain insight into new and innovative solutions and discover new products and equipment that will help you do your job in a more efficient and safe manner. We encourage you to talk to the vendors about what is most important to you.

The Conference includes many networking opportunities for you to meet and interact with your colleagues. The Students & Young Professionals (SYP) Committee is organizing a **Community Service Project** for Sunday. The **Annual PWEA Golf Tournament** will also be on Sunday this year.

On Monday, the Professional Operators Committee will host a **Plant Tour**. Also on Monday is the **President's Reception**; the **Annual PWEA Awards Ceremony & Reception**; and the **Tailgate Dinner & Cornhole Tournament**.

On Tuesday, there is the Women in Water Luncheon; the Beer & Pretzels/ Wine & Cheese Reception; and Operator Olympics.

We believe the PennTec Conference will provide everything you need under one roof – education, vendor contacts, and networking. We look forward to seeing you there!





James Degnan Chair, PennTec 2025 Conference Committee

William LaPorte PWEA President



Robert W. Dengler II Chair, Penntec 2025 Program Committee





Matt Warfel Co Vice-Chair, Penntec 2025 Program Committee Garrett Stoy Co Vice-Chair, Penntec 2025 Program Committee

Endimal[™] Series Odor Control Solutions

APPLICATIONS

Solids Separations Processes Collection Systems/Lift Stations Septage Receiving Areas Influent / Grit Chambers Solids Transport Compost Operations

REACTS WITH

H2S Mercaptans Amines Dimethyl Disulfides Other Volatile Sulfur Compounds

More Products... More Solutions... That's Coyne! Reacts Instantaneously on Contact No Harmful Byproducts in Effluent Reduces H2S Based Corrosion Improves Dewaterability Easy to Feed Liquid Selective Reaction - Reduces Demand Provides Safer Working Environment Cost Effective vs Other Oxidizer Chemistries

PACKAGING

BENEFITS

Pails Drums Totes Bulk



Coyne Chemical Environmental Services Main: 215-785-3000 www.coyneenvironmental.com

Where do you find Carollo

In our culture In our solutions In our communities

Like water itself, innovation flows through every challenge and shapes new possibilities. For over 90 years, Carollo has pioneered breakthroughs in water technology – from resilient infrastructure protecting growing communities to groundbreaking solutions safeguarding public health and ecosystems. At Carollo, innovation isn't just about what's new – it's about what's necessary. Every advancement, every improvement, and every solution flows from a single purpose: shaping a future where water enriches every community it touches.



Keynote Presentation

Jill Whitcomb, Pennsylvania Department of Environmental Protection (DEP) Deputy Secretary – Office of Water Programs



We are delighted to welcome Jill Whitcomb as our keynote speaker. As Deputy Secretary of the Office of Water Programs at the Pennsylvania Department of Environmental Protection (DEP), Jill brings a distinguished career in water quality management, regulatory compliance, and watershed restoration. Her leadership has played a vital role in advancing Pennsylvania's mission to protect and

improve its water resources.

In her current role at DEP, Jill provides strategic oversight and direction for four key bureaus. These bureaus are responsible for managing both point and nonpoint source pollution, permitting and compliance, setting and assessing water quality standards, regulating water obstructions and encroachments, ensuring flood protection and dam safety, overseeing safe drinking water and source water protection, and coordinating efforts involving interstate waters, compacts, commissions, and coastal zone management.

Jill's career at DEP spans several staff and leadership positions. Most recently, she served as Director of the Bureau of Watershed Restoration and Nonpoint Source Management, where she led statewide programs addressing nonpoint source pollution, worked closely with conservation districts, supported agricultural conservation and compliance initiatives, and directed Pennsylvania's Chesapeake Bay watershed restoration efforts. Before joining DEP, she began her career with the Lancaster County Conservation District, laying the foundation for her lifelong commitment to environmental protection.

She holds a Master of Environmental Pollution Control from Penn State University and a Bachelor of Science in Biology from Lebanon Valley College.

In her keynote address, Jill will speak to the critical importance of protecting and sustaining Pennsylvania's water resources and infrastructure. She will emphasize the value of collaboration, highlighting the role of partnerships and networks across state, local, private, and non-governmental sectors. These connections are, and will continue to be, essential to overcoming the evolving challenges of water resource management.

Water and Wastewater Treatment Chemicals and Equipment

Mini bulk delivery

- Tailored treatment programs designed specifically for your facility
- Large selection of equipment: pumps, tanks and so much more

Call Today! LOCAL SERVICE: 877.731.8187

www.hawkinsinc.com · wtg@hawkinsinc.com







Hawkins Products:

- Phosphorus removal
- Corrosion control
- Zebra mussel control
- Bioaugmentation. biological controls
- Settling aids
- Dewatering polymers and so much more
- Disinfection chemicals
- Odor control chemicals
- Dechlorination chemicals
- TSS (Total Suspended) Solids) control
- Lagoon sludge reduction
- Antifoams



CHEMICAL FEED AND PROCESS EQUIPMENT FOR WATER & WASTEWATER

Visit our website for account listing: www.bissnussinc.com

PITTSBURGH

2600 Boyce Plaza Rd Suite 218 Pittsburgh, PA Tel: (412) 221-1200 Fax: (412) 221-5952

CANFIELD

7 Court Street Suite 210 Canfield, OH 44406 Tel: (330) 533-5531 Fax: (330) 533-6857

FOR CHEMICAL FEED PARTS & SERVICE VISIT www.bnrinc.com



35+ YEARS SERVING THE COMMUNITY

Kettle Creek Environmental Education Center

Sunday, 11:00am-3:00pm

The community service project at PennTec will take place at the Kettle Creek Environmental Education Center (KCEEC).

The education center is run by the Monroe County Conservation District (MCCD) and features a critter room, art gallery, and gift shop with books and trail guides. Additionally, the site features over 150 acres of wildlife sanctuary, 3 miles of trails, and a children's discovery area.

The MCCD regularly holds events for the public, including summer camps, bog tours, and maple sugaring to name a few. Volunteers will be doing basic clean up tasks around the Center and nearby areas of the wildlife sanctuary.

There will also be opportunities to improve facilities by the construction of bird boxes and a new feature at the children's discovery area.

Volunteers are asked to bring their own work gloves if possible. Water, snacks, and lunch will be provided in addition to a brief facility tour following the volunteer activities.

Participation is open to anyone; conference registration is not required. Volunteers are asked to wear long pants, closed toe shoes, and to dress for the weather. The Project will be held rain or shine.







ENGINEERED TOGRIND. BUILT TO LAST.



GRINDER PUMPS

- Models from 1 15 HP
- Single-direction & reversing cutter options
- Completed packages with basin & controls
- Explosion-proof units



zoellerengineered.com







2146 Chamber Center Drive Ft. Mitchell, KY 41017 T: 859.426.5178 |F: 859.426.5177 sullivanenvtec.com PO Box 542, Malvern, PA 19312 40 Lloyd Ave, Ste 202, Malvern, PA 19312 610-296-0970; FAX 610-640-4599 sales@gaylecorp.com

Annual PWEA Golf Tournament

Sunday, 1:00 pm

Join your colleagues for a friendly game of golf at the Pocono Manor Golf Course in Pocono Manor, PA. The course is located about 15 minutes from the venue. Refreshments and prizes will be provided. Net proceeds from the tournament will benefit PWEA's Operations Challenge Program.



DESIGNED FOR PEOPLE. DESIGNED FOR YOU.

Engineering | Planning | Infrastructure Solutions www.hrg-inc.com



HRG is a proud supporter of the PennTec Conference.







AquaNereda[®] Installation: Wolcott WWTP at Wolcott, KS



SVI₅ comparison of aerobic granular sludge (left) and conventional activated sludge (right)

THE ONE AND ONLY. TRUE AEROBIC GRANULAR SLUDGE TECHNOLOGY

With over two decades of installed experience at more than 100 facilities worldwide, Nereda[®] technology is the **One and Only** true aerobic granular sludge on the market today.

Since its introduction to the U.S. and Canada in 2017, more than 40 AquaNereda[®] plants are currently in design, under construction or in operation throughout North America.

Consultants and end-users continue to realize the process and cost saving benefits associated with AquaNereda technology through on-site pilot testing, installation visits and technical seminars.

ADVANTAGES OF AQUANEREDA® TRUE AGS TECHNOLOGY:

- Design MLSS of 8,000 mg/l greatly reduces footprint
- · Capable of enhanced nutrient removal
- · Suitable for retrofits and greenfield sites
- · Exceptional effluent without chemical addition
- Robust process that adapts to changing conditions
- Applicable for municipal and industrial waste streams
- Significantly less construction cost compared to conventional treatment
- Energy and chemical savings results in lowest cost of ownership





www.AquaNereda.com | 815.654.2501

Represented by:



Bill LaPorte (Eastern Pennsylvania) P 717.433.7837 | wlaporte@envirep.com Dave Lounsbury (Central Pennsylvania) P 717.940.0292 | ticenvironmental@aol.com



Aqua-Aerobic Systems, Inc. is the exclusive U.S. and Canada provider of Nereda® technology developed by Royal HaskoningDHV.

Vendor Get-Together

Sunday, 5:30-7:30pm

Exhibitors are invited to attend this informal gathering organized by the PWEA Exhibits & Sponsors Committee. Come meet the committee and PWEA leaders at Redd's Piano Bar.



PWEA Annual Business Meeting

Monday, 12:30-1:00pm

Conference attendees are invited to attend and participate in the Annual Business Meeting. The Board of Directors welcomes input from everyone. PWEA members will vote on Officer positions.

Coffee and dessert will be available during the Annual Business Meeting.



Alternative Disinfection to Chlorination Processes PERACETIC ACID

APPLICATIONS

Wastewater Disinfection Potable Water Treatment CSO Treatment Industrial Disinfection Processes

BENEFITS

Easy to Feed Liquid No Harmful DBP's in Effluent Low Residual Toxicity No Dechlorination Required 4 to 5 Log Disinfection Efficiency

More Products... More Solutions... That's Coyne!

EFFECTIVE ON

Bacteria Viruses Cyanobacteria Endocrine Disruptors Yeast & Spores



Coune Chemical Environmental Services Main: 215-785-3000 www.couneenvironmental.com PumpMan Pittsburgh is the region's leading provider of equipment sales, service & repair for water and wastewater treatment equipment in the Municipal, Commercial, and Industrial markets.

SERVICE YOU CAN TRUST

Pump

 Industry Leading Experience & Expertise

V.C. Weil Com

BAS

- Full Line of Water and Wastewater Treatment Equipment
- 24/7 In Shop and Field Service Maintenance & Repair
- Planned Maintenance Contracts

Our technicians are on-call 24/7 to minimize downtime. Call for emergency service at 1.866.929.3451.

412.487.7140

pumpman.com/Pittsburgh

PITTSBURGH OFFICE 3812 William Flynn Hwy, Bldg. 2 • Allison Park, PA 15101 412.487.7140 • pumpman.com/Pittsburgh.com

> WV OFFICE 1740 Union Carbide Drive, Bldg. 740 South Charleston, WV 25303 304.546.5875 • 304.444.0227



Mount Pocono Plant Tour

Authority Explore Mount Pocono Municipal Authority

Date: June 23, 2025 Time: 1:00-3:30pm Location: Mount Pocono Municipal Authority 1361 Pocono Blvd, Mount Pocono, PA 18344

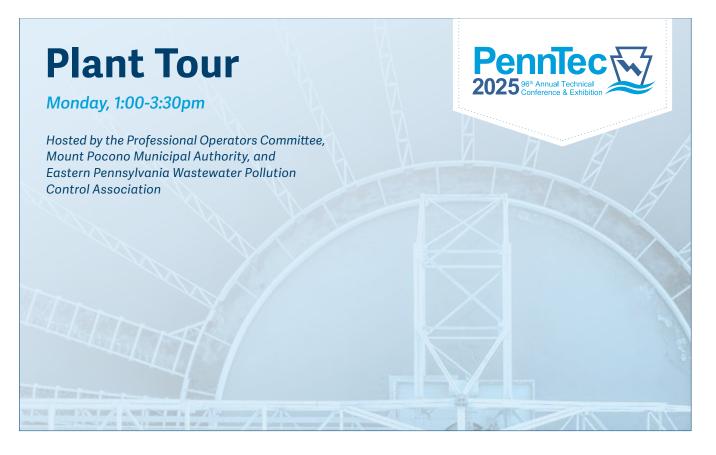
Join your colleagues for a tour of the Mount Pocono Municipal Authority in Pocono Manor, PA. The plant is located about three minutes from the venue. The tour is hosted by the Professional Operators Committee, Mount Pocono Municipal Authority, and Eastern Pennsylvania Wastewater Pollution Control Association.

Plant Highlights

The Mount Pocono Municipal Authority (MPMA) is the regulatory body for the Sewer District. It is a separate entity governed by a five-person board.

The MPMA was chartered by the Borough Council to provide municipal waste services in 1972. The original construction of the Wastewater Treatment Plant was completed in 1975. There were two prior upgrades to the most recent upgrades that were completed in 2020.

Be sure to register in advance to reserve your seat on the bus. A limited number of tickets may be available on-site, subject to prior sale. The cost is \$35 per person.





www.bucharthorn.com

Greg Clifford Regional Sales Manager



VAG USA, LLC 234 Clay Avenue Ext. Mars, PA 16046 Office: (724) 609-1077 Mobile: (724) 900-0241 g.clifford@vag-group.com www.gaindustries.com

800.753.7566 ahequipment.com



TRUVAC

Infrastructure Equipment Solutions

NAM

0







Contact Your Territory Sales Manager

PWEA Annual Awards Ceremony & Reception

Monday, 5:45-7:00pm

The Annual Awards Ceremony honoring your colleagues who have won prestigious state and national awards will take place following a short reception. This event is open to all Conference attendees.

Pre-registration is required. There is no charge to attend. Includes hors d'oeuvres and a drink ticket.

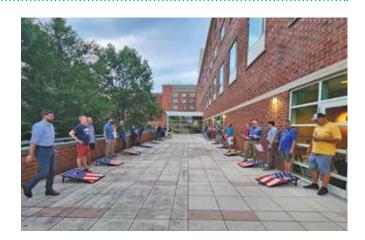
Tailgate Dinner & Cornhole Tournament

Monday, 7:15-9:30pm

The PWEA Students & Young Professionals Committee will host a fun and friendly evening of networking, cornhole tournament, food, drinks and great prizes. A tailgate themed dinner buffet will begin at 7:15pm and cornhole teams will be randomly formed immediately after dinner. The event is open to all experience levels, professionally and competitively. Attendees are encouraged to don their favorite team's tailgating attire.

Pre-registration is required. Tickets are \$55 per person. Dinner and a drink ticket are included.





FJS

Bridging the gap between idea + achievement

hdrinc.com | Philadelphia, Pittsburgh, Bethlehem, Plymouth Meeting, Mechanicsburg



We saved a Utility \$170,000!

Over 4,000 Successfully Released!

Our exclusive HydroV valve release system can free your seized valves without replacement!





Women in Water Luncheon

Tuesday, 11:45am-1:00pm

Join your fellow colleagues for the third annual Women in Water Luncheon. This luncheon will feature networking opportunities and discussion with prominent women who are dedicated to water quality and who will share their personal and professional challenges and successes, work/life balance, and educational experiences.

Pre-registration is required. There is no charge to attend.

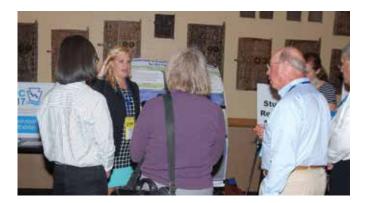
PWEA Student Research Poster Contest

WR

Tuesday, 11:45am-1:00pm

The PWEA Research Committee reviews student research submissions and invites qualifiers to participate in the Poster Contest. After judging by faculty and practicing engineers, the top three poster presenters in both undergraduate and graduate categories are chosen. Posters will be available for viewing by Conference attendees. Awards will be presented at the Student Research Program.





WATER WASTEWATER PLANNING, DESIGN, AND CONSTRUCTION MANAGEMENT

PEOPLE FOCUSED - PROJECT DRIVEN www.wrallp.com

GAYLE CORPORATION

PROUDLY CELEBRATING 40 YEARS OF SUCCESSFUL PROJECT OUTCOMES!

"Environmental Equipment Sales & Service" – *Since 1984* Office (610) 296-0970 | Fax (610) 640-4599 | Inquiries: sales@gaylecorp.com

GORMAN-RUPP (Southeastern, PA territory – Philadelphia, Montgomery, Chester, Delaware, Bucks Counties) Pre-engineered packaged pump & control systems, self-priming centrifugal pumps, submersible non-clog pumps, pressure booster systems, flows up to 15,000 GPM with end-suction centrifugal non-clog pumps

KSB

Submersible pumps, sludge and slurry pumps, submersible dry pit and axial flow propeller pumps, submersible process mixing equipment

CLEANWATER 1 "PolyBlend" - Liquid and dry polymer feed systems "DynaBlend" – Liquid polymer feed systems

ZOELLER ENGINEERED PRODUCTS (ZEP)

Submersible grinder pumps, solids handling submersible pumps, packaged pumps stations including complete control panel systems

AQUAPOINT

Bioclere modified trickling filter, iFas & MBBR fixed film wastewater treatment systems to 1,500,000 GPD

AURORA

Horizontal split case, end-suction water pumps, ASTM 382 / NSF 61 approved for potable water use, dry pit non-clog sewage pumps

GUNNCO Landfill leachate pump systems

HAIGH "Pipeliner" Sludge conditioning grinders

MID-AMERICA PUMP AND SUPPLY

Verti-Line & Goulds vertical turbine pumps and aftermarket parts

THERN

Portable lifting solutions with davit crane systems

TIGERFLOW

Packaged water booster systems for single source responsibility, NSF 61 certified for potable applications, UL508 custom control systems



Operator Olympics

Tuesday, 4:45-5:45pm

This is a fun activity based on some real Olympic events, but with a wastewater twist. Games may include:

Bowling, using a ball from a pump and BOD bottles; Plunger Toss, tossing small plungers into a bucket; Golf Ball Chip, chipping golf balls into a toilet; Hockey, score a goal through a toilet seat; and Turd Toss, throw (plastic!) turds into a bucket.

Can you think of a better way to spend the afternoon?

There is no charge and pre-registration is not required. This is a competitive event and prizes will be awarded.







www.industrialfurnace.com



for Association updates



BUILT FOR THE OPERATOR

NO ONE KNOWS IT BETTER.

We know the people running your systems are the heart of it all. That's why we seek operator input and design with them in mind. We want to make their jobs easier, whether they're managing treatment plants, monitoring water flow, or maintaining pipe networks. We focus on clear, intuitive systems so they can focus on what matters: keeping things running smoothly for your community.



PLANNING & DESIGN

potable water

wastewater

civil | municipal

610.373.6667 | entecheng.com

Reading (HQ) | Hawley | Lititz | Mountaintop | Pittsburgh | Pottsville

Back by popular demand is the PWEA Biosolids Beauty Contest!

The Exhibitor & Sponsors and Biosolids Committees are once again hosting this fun contest at the 2025 PennTec Conference. Please be sure to stop by the designated area inside Kilimanjaro Ballroom in order to view the submissions and to see how creative our Biosolids Professionals can be! The winner will be announced during the lunch break on Tuesday, June 24, and receive a prize and a trophy with a year of bragging rights for the winner. Who will be crowned winner of the PWEA 2025 Biosolids Beauty Contest?

Please contact Chris Boyd via email (*chrisb@chartermachine.com*), or phone (732-425-7489) with any questions.

No entries will be accepted after June 7. All displays must be turned in at the Booth 56 on or before 9 am on Monday June 22, 2025; and must be complete and ready for viewing upon delivery.

Contestants will not be permitted to make any changes and/ or modifications to their displays once they are turned in.







Proud sponsor of PWEA

WATER ENGINEERING SOLUTIONS FOR A RESILIENT TOMORROW.

Global expertise. Local impact.







Rescuing water from leachate

- High Recovery Rates
- Performance Guarantees
- Low Energy Requirement
- Treats for UVt Interference
- Long Membrane Life
- Simple Modular Design
 and Operation
- Removes Fluorinated
 Compounds from Leachate



RESCUING WATER FROM LEACHATE

www.rochemamericas.com

ROCHEM® AMERICAS

Rescuing water from leachate

PFOS/PFAS				
Compound (ng/l)	Leachate	R0 1 Permeate	RO 2 Permeate	Rejection
Perfluorobutanesulfonic acid (PFBS)	280	2	<1.9	>99.3%
Perfluorobutanoic acid (PFBA)	1100	5	<1.9	>99.8%
Perfluoroheptanoic acid (PFHpA)	480	-2	<1.9	>99.6%
Perfluorohexanesulfonic acid (PFHxS)	690	-2	<1.9	>99.7%
Perfluorohexanoic acid (PFHxA)	2100	7.8	<1.9	>99.9%
Perfluorooctanesulfonic acid (PFOS)	200	2	<1.9	>99.1%
Perfluorooctanoic acid (PFOA)	820	2.5	<1.9	>99.8%
Perfluoropentanoic acid (PFPeA)	880	2.7	<1.9	>99.8%
Total	6550	18	0	>99.9%

4	

UVt RESULTS				
Source	UVt			
City Water	93%			
POTW Effluent (No Leachate)	63-76%			
POTW Effluent (With Leachate)	17.6%			
Nanofiltration Permeate	2%			
POTW Effluent w/10% Nanofiltration Permeate	46%			
Leachate Reverse Osmosis Permeate	84%			
POTW Effluent w/ 10% RO Permeate	78.5%			
POTW Effluent w/ 25% RO Permeate	80.5%			
POTW Effluent w/ 40% RO Permeate	81.1%			

MERCURY REMOVAL				
October	(ng/l)	196	<0.5	99.74%
November	(ng/l)		<0.5	
December	(ng/l)		<0.5	
January	(ng/l)		<0.5	
February	(ng/l)		<0.5	



Bernie Rieder | 574-360-4535 bernie@rochemamericas.com

Professional Development Hours and Tracking

NEW for 2025:

PWEA now uses an electronic system to track PennTec session attendance. PWEA will issue a record of your attendance after the conference.

Please be sure to do each of the following to ensure we accurately track your attendance:

- Have the QR code on your badge scanned as you enter your first session
- Have the QR code on your badge scanned as you enter the next session after the lunch break
- Have the QR code on your badge scanned before heading to lunch and at the end of the day

Tips

- You are allowed to move between rooms during a session, no rescanning necessary
- Any volunteer may scan you into and then out of the sessions

Important to Know

- You must scan both in and then out at the end of each session in order for PWEA to issue a record of attendance for that session.
- The record will show which sessions you attended during the conference, and the amount of time spent. Example: PennTec 2025 Monday A.M. Technical Sessions
- You must be registered for the day of the conference for which you attend sessions and seek a record.
- After the conference, staff will verify all scanned information and produce a record of attendance. This record will be emailed approximately four weeks after the conference.





Wastewater & Water Utilities Solutions



Contact Us Today

814.753.4249

info@cpengineers.com cpengineers.com

CP'S EXPERTS CAN SOLVE YOUR PROBLEMS, HELP YOU SECURE FUNDING & SAVE YOU MONEY

Advancing the Quality of Life in Pennsylvania Communities





CLEAN WATER. SMART SOLUTIONS.

Delivering lasting water and wastewater solutions across Pennsylvania and beyond.



CHASOLUTIONS.COM (610) 865-3000

Technical Program Details

Five extra minutes has been added between sessions to allow attendees time to move between Technical Program rooms. should they wish to do so.

MONDAY MORNING

BIOSOLIDS PROGRAM

Moderators: Charles Winslow; Richard Valiga

8:40am-9:10am – PFAS in Wastewater – From Research to Reality Speaker: Samir Mathur, CDM Smith

This presentation will provide an overview of the cutting-edge research related to PFAS in wastewater, as well as guidance on how utility managers and operators in Pennsylvania can apply this research to address real-life PFAS issues at their specific WRRF.

9:15am-9:45am – Tracking PFAS in a Biosolids Gasification Facility Operating Full Scale

Speaker: Mohammad Abu-Orf, PhD, Hazen and Sawyer

The presentation will focus on PFAS measurement in a full-scale gasification facility. PFAS measurements were conducted at the end of March 2024, including the first PFAS air testing at a full-scale gasification.

10:20am-10:50am – Hydrothermal Carbonization – A Regional Solution for Biosolids Management

Speaker: Jeremy Taylor, SoMax Circular Solutions

SoMax Circular Solutions conducted a feasibility study to assess the development of a centralized Hydrothermal Carbonization (HTC) facility in the Philadelphia suburbs, designed to accept biosolids from four WRRFs. The study shows long-term stability and savings for contributing WRRFs. This presentation will share the results of the study, and the most recent developments in HTC.

10:55am-11:25am – Innovative Solutions for Biosolids Management: Exploring Advanced Thermal Drying Technologies Speaker: Karthik Reddy Manchala, GHD

This presentation explores advanced thermal drying technologies for municipal biosolids management, focusing on energyefficient designs, product quality, and emerging innovations like PFAS pretreatment. It highlights key design criteria, trade-offs, and practical case studies, showcasing sustainable solutions for reducing biosolid volumes, improving disposal logistics, and enabling safe reuse or advanced processing.

11:30am-12:00pm – Transforming Sludge: Supercritical Water Oxidation (SCWO) for a PFAS-Free Future Speaker: Naomi Senehi, 374Water

Supercritical water oxidation (SCWO) is applied to numerous municipal and industrial biosolids to illustrate consistent, effective conversion to inert PFAS-free mineral effluent available for safe reuse. Empirical data from a case study is used to illustrate how the technology can be installed on site with minimal footprint and within budget.

COLLECTIONS SYSTEMS PROGRAM

Moderators: Nick Modany; Lucas Chapman

8:40am-9:10am – Sewer Sociology

Speaker: Peter Frick, ADS Environmental Services

This paper will present a collection of interesting observations of human behavior documented through sewer flow monitoring data. The authors have performed engineering analysis on data from thousands of flow monitoring locations across the United States, and this paper will show those of general interest, including serious and light-hearted material.

9:15am-9:45am – Controlling the Source: Identifying, Funding, and Evaluating Performance of Impactful, Cost-Effective Source Control Projects

Speaker: Tim Prevost, Allegheny County Sanitary Authority; Andrew Potts, Jacobs

The presentation will describe the development and application of the project efficiency modeling and constraint and opportunity analysis, discuss the performance evaluation process, provide a summary of performance for nearly 100 grant projects, and discuss lessons learned for their applicability in helping to address wet weather issues in other communities.

10:20am-10:50am – Democratizing Sewer Capacity Planning through Digital Innovation Speaker: Keith Hodsden, Trinnex

In sewer capacity planning, it is essential to understand the current system's capacity and predict future demands accurately. The process involves a detailed assessment of the sewer system's ability to accommodate current and future flows, including wet weather peak flows. This presentation will discuss the current state-of-the-art in capacity planning and discuss the importance of modernizing the capacity planning methods to suit current needs. We will also present case studies of modernizing capacity planning for utilities and show examples of how utilities can create end-to-end workflows to simplify their sewer permitting and capacity planning process.

10:55am-11:25am – The Future is Smart Sewer Inspections Speaker: Josh Ford, PipeAld

Al is transforming sewer pipe inspections by enhancing efficiency, accuracy, and cost savings. By automating defect detection and coding, PipeAld[™] reduces inspection time, eliminates human bias, and integrates with GIS for a digital twin. Join us to explore PipeAld's predictive maintenance capabilities and its seamless integration with existing technologies.

11:30am-12:00pm – Tracking Asset Information: Integrating Digital Solutions to Augment Data Collection and Data Accessibility Speakers: Robert Cecchetti; Josiah Bair, GHD

Digital solutions provide the ability to track asset information, automate workflows, reduce the time needed for quality control and review, and ultimately increase design productivity. Furthermore, digital solutions provide a platform to effectively convey information to stakeholders to alleviate questions and stress during construction.

Technical Program Details

Five extra minutes has been added between sessions to allow attendees time to move between Technical Program rooms.

ENGINEERING & CONSTRUCTION PROGRAM

Construction Moderators: Ben Briston; Rucha Shah

8:40am-9:10am – Alternate Delivery Examples – Plowing the Way for Efficient Private Water Project Delivery in PA Speakers: Michael Bisignani; Joseph Koehler, GHD

Allan Myers and GHD have jointly delivered over ten successful water and wastewater projects in Pennsylvania. This presentation highlights alternative delivery approaches, challenges, outcomes, and lessons learned, with projects ranging from \$350K collection system upgrade projects to \$20M water treatment plant capital improvement projects for private water companies.

9:15am-9:45am – Safety in Design

Speaker: Jared M Lewis, CSP, Hazen and Sawyer

EH&S is an inherent part of the design process and in many ways can be considered an engineering discipline. This presentation is an overview of the Prevention through Design/ Safety in Design methodology and how it can be applied on water infrastructure projects according to standard design processes and client requirements.

10:20am-10:50am – Predictive Design Process Modeling for Operation During Construction and Startup Speaker: Kevin Hoffman, KLH Engineers

McCandless Township Sanitary Authority utilized prudent planning to design a WWTP upgrade elected to Phase the construction of the biological process upgrades consistent with future influent loads. Design efforts to model the process through phasing as well as construction and startup of Phase I will be compared to actual operational data experienced.

10:55am-11:25am – Startup and Integration of a New 360 MGD Headworks Facility into an Existing Plant Speaker: Isaac Katz, WRA

We are up and running! A new 360 MGD headworks building for ALCOSAN is officially online. This presentation will walk through all the ins and outs of startup, testing, and integration of the new headworks into an existing plant.

11:30am-12:00pm – We Will Grit By – An Increasingly Complex Grit System Rehabilitation Speaker: Jeff Naumick, GFT Inc

UTILITY MANAGEMENT & GOVERNMENT AFFAIRS PROGRAM

Moderators: Mark Pickering; Maria White

8:40am-9:10am – Modernizing Wastewater Compliance and Operations through a Digital-First Framework at a Wastewater Utility in the Northeastern United States

Speaker: Keith Hodsden, Trinnex

The wastewater resource recovery facility (WRRF) processes wastewater from its constituent communities with an average daily flow of 20 to 30 million gallons per day (MGD) with peak flows in the excess of 100 MGD. The WRRF processes lab samples in an internal lab and stores the data in a laboratory information management system (LIMS). Data is also collected from plant instrumentation via SCADA. As a first step on its digital transformation journey, they are interested in modernizing their infrastructure by integrating their data within a digital platform and leveraging modern digital technologies to automate processes and optimize operations using Trinnex's waterCAST platform. The WRRF's goals are to provide a platform for the utility staff to be able view the data on a single platform while providing the ability to showcase WRRF performance both internally and externally. This presentation will cover the digital transformation journey that the WRRF has embarked upon. It will also identify concrete steps for wastewater utilities to future-proof their operations while reducing time spent on routine activities such as monthly reporting, tracking sampling requirement and compliance, etc. We will also cover how the WRRF is using artificial intelligence (AI) to predict influent flow to their WPCF to forecast treatment needs especially under peak flow conditions.

9:15am-9:45am – Mastering the Matrix: Four Fundamentals for a Secure and Resilient SCADA System Speakers: Heather Heltzinger, LO, Renegade Solutions, LLC; Hank Hosler, CoStream

This presentation focuses on four key cybersecurity fundamentals for wastewater systems: Asset Management, ensuring control over critical infrastructure; Segmentation, enhancing security by isolating network zones; Remote Access, enabling secure monitoring from off-site locations; and Data Integrity, maintaining the accuracy and reliability of operational data. A Q&A session will follow for further discussion.

10:20am-10:50am – Right Sizing a Facility Assessment Managing Infrastructure Before it Becomes Critical Speakers: Ed Carpenetti; Matt Crow, Black & Veatch

This presentation will provide an overview of considerations for developing an asset management program, and interfacing with Master Planning efforts. This is not a one size fits all approach and asset management can be tailored to fit utilities of any size while still providing valuable information in an easy-to-understand format.

10:55am-11:25am – Holistic Approach to Improved Nutrient Management with The Water Research Foundation Framework for Success (WRF4974) and Application in the Delaware River Basin *Speaker: Jake Metch; Tyler Erb, HDR*

This Water Research Foundation project developed a framework to provide a structured process to develop holistic watershed-based nutrient reduction plans. This framework is being applied in the Delaware River Basin through the establishment of a partnership of major municipal dischargers to discuss technical strategies, estuary science, and regulatory activities.

UTILITY MANAGEMENT & GOVERNMENT AFFAIRS PROGRAM (CONTINUED)

11:30am-12:00pm – Navigating One Water Planning through Municipal Water Programs: Meeting Multiple Objectives and Regulatory Challenges (WRF Project 5175) Speaker: Adam Hendricks, GHD

Navigating One Water Planning through Municipal Water Programs (WRF Project 5175) is exploring One Water strategies for municipal water utilities. This presentation will provide approaches for One Water solutions to address current and future regulatory obligations and achieve multiple benefits with a detailed One Water Planning Framework.

STORMWATER PROGRAM

Moderators: Brad Smith; Jason Hinz

8:40am-9:10am – Creating a Stormwater Authority – Everything You Need to Know

Speakers: Vanessa Nedrick, PE, MSEM; Daulton George, Remington & Vernick Engineers

In April 2021, Warminster Municipal Authority, a water/ sanitary sewer authority, took ownership and maintenance of the stormwater system from Warminster Township, with no stormwater experience, to running a successful stormwater program. This presentation will outline everything you need to know creating a stormwater authority or utility, with real examples.

9:15am-9:45am – Using Technology to Cost Effectively Inventory Stormwater Assets and Efficiently Invest in Infrastructure Management

Speaker: Ben Gilberti, PE, Herbert, Rowland & Grubic, Inc. See how Evans City Borough is using technologies like thermal imaging drones, pipe imagery, and GIS data inventory to systematically improve the operation and rehabilitation of their stormwater conveyance system. This technology helps them make the most efficient use of capital resources while correcting insufficient capacity and deteriorating condition.

10:20am-10:50am – Case Study: Design and Construction of Seven Rain Gardens in South Philadelphia: Lessons Learned from the 24th Street Greening Improvements Project

Speakers: John Brennan, PE; Jaime Gandara, PE, Hazen and Sawyer This case study details the design and construction of seven rain gardens in South Philadelphia's 24th Street Greening Improvements Project. It examines geotechnical constraints, utility challenges, and construction adjustments. Lessons learned emphasize the importance of flexibility and problemsolving during construction, which resulted in optimized stormwater capture and enhanced community spaces.

10:55am-11:25am – Smart Stormwater Solutions: Managing Your Budget and Program for Maximum Impact Speakers: Tyler Erb;

Bruce Hulshizer, PE, Herbert, Rowland & Grubic, Inc.

Do you feel overwhelmed by an ever-increasing list of stormwater concerns and projects? See how two stormwater utilities are making the best use of available funds: clearing a decades-long backlog of repair and improvement needs while minimizing future costs through proactive infrastructure assessment and strategic capital planning.

Technical Program Details

STORMWATER PROGRAM (CONTINUED)

11:30am-12:00pm – Transforming Traditional Detention Basins: Strategies and Case Studies for Retrofits

Speakers: Ryan Cumming, HRG and Matt Gunther, PTSA

Basin retrofitting is expected to grow as MS4 regulations evolve. See how pre-soil testing, sophisticated modeling, and other strategies can maximize the sustainability and resilience of your basins. Deliver basins that more accurately match real-world flow patterns and can adapt to changing weather patterns for the long-term.

MONDAY AFTERNOON

BIOSOLIDS PROGRAM

Moderators: Charles Winslow, Richard Valiga

1:00pm-1:30pm – A Regional Biosolids Management Study in New England Speaker: Vanessa Borkowski, Stantec

There is a biosolids crisis occurring in New England, and one method for mitigating the effects of the crisis is to form an alliance to develop a regional biosolids solution. This evaluation was completed by three utilities in New England to assesses the feasibility of a regionalized biosolids management facility. The process for the Study included a regulatory investigation, baseline costs, market and value chain study, sidestream analysis, technology operating scenarios, cost evaluation, and non-financial evaluation.

1:35pm-2:05pm – Silver Spring Township's Journey to Beneficial Use

Speakers: Lisa Challenger; Jim Stevens, Material Matters, Inc. Silver Spring Township Sewer Authority (SSTSA) operates a small wastewater treatment facility in central Pennsylvania – with a history of solids management via landfill disposal. Facing rising costs and uncertainty, SSTSA engaged Material Matters to review plant operations and provide feedback on achieving Class B standards. This presentation will discuss the feasibility study conducted by Material Matters for digester optimization without capital investment and their development of a cost-effective beneficial use program.

2:10pm-2:40pm – Sludge Settleability Improvements Associated with Full-Scale Densification of BNR Activated Sludge Speakers: Nicolas Tenorio; Alex Doody, CDM Smith

In January 2023, a quarter-scale pilot of inDENSE selective sludge wasting was conducted at the Middle Basin Wastewater Treatment Facility to quantify settleability improvements in the final clarifiers. This presentation summarizes the pilot results and additional testing by CDM Smith during a site visit in June 2023.

3:40pm-4:10pm – Biosolids Gasification and Pyrolysis – Lessons Learned from Early Adopters

Speakers: Charles Winslow, PE; Jay Surti; John Harris, GHD This presentation will provide Utility Owners, Engineers, and Operators a fundamental understanding of biosolids pyrolysis and gasification facility planning, design, construction and operational considerations, including lessons learned by early adopters in the form of case studies that will be valuable for the implementation and betterment of future projects.

Technical Program Details

BIOSOLIDS PROGRAM (CONTINUED)

4:15pm-4:45pm – I Just Want My Data – Working with Contract Laboratories to Get the Right Results Speaker: Natalie Switala, Material Matters

This presentation will provide participants with an overview of laboratory accreditation changes, examples of challenges with contract laboratory results, and give audience members insight into key things to be looking at on a regular basis when reviewing results of tests completed by contract laboratories.

COLLECTIONS SYSTEMS PROGRAM

Moderators: Melissa Smith; Matt Cichy

1:00pm-1:30pm – Using a Phased Contract Approach for Trenchless Sewer Rehabilitation in Pittsburgh, PA

Speakers: Nick Modany; Toby Stutzman, PGH Water The Pittsburgh Water and Sewer Authority selected the Knoxville neighborhood for sewer rehabilitation due to being an Environmental Justice Area and its over 100-years-old sewer system. When JMT recommended 160 repairs on 7.5 miles of pipe, PWSA decided to phase the project and two separate PENNVEST funding applications were prepared.

1:35pm-2:05pm – The Value of Trenchless Auger Boring in Complex Sewer Main Rehabilitations, a Case Study Speakers: Caleb Krauter, PE;

Tas Hossain, EIT, Herbert, Rowland & Grubic, Inc.

Trenchless Auger Boring helped Capital Region Water replace a 12-inch sanitary sewer pipe that presented significant challenges, such as a depth of 27-36 feet, nearby utility conflicts with a 54-inch Storm RCP, and infiltration issues. Discover how Trenchless Auger Boring provides a unique solution for replacing utilities in complex environments.

2:10pm-2:40pm – Paper Title: Reinforced CIPP Lining of the 111-Year-Old Front Street Interceptor – Capital Region Water – Harrisburg, PA Speaker: Kevin Alspach, AECOM

The Front Street Interceptor Project involved installation of reinforced CIPP lining throughout 14,895 LF of box-shaped reinforced concrete pipe (RCP). Liner design was completed using ASCE MOP 145. Construction involved long trucked-in shots, made feasible by designs used in MOP 145, and reinforced lining tube materials to reduce required design thickness, and overall product weight.

3:40pm-4:10pm – Quizzo

4:15pm-4:45pm - Quizzo

ENGINEERING & CONSTRUCTION PROGRAM

Process Modeling Moderators: Rucha Shah; Scott Armbrust

1:00pm-1:30pm – Biological Process Modeling for Strategic Operational Improvements and Guidance of Capital Solutions Speakers: Dylan Cowell, EIT;

Amanda Lee, Herbert, Rowland & Grubic, Inc.

Biological process modeling can serve as a key tool when evaluating operational changes and capital solutions for wastewater treatment plants. This presentation will overview model development and highlight case studies through which these models were used to provide cost-effective and datadriven solutions to critical issues.

1:35pm-2:05pm – Process Digital Twins – Twice the Insight or Two Times the Headache? Speaker: Patrick J Dunlap, Black & Veatch

Process digital twins have emerged as potentially transformative tools which can provide real time insights which previously would require hours behind a computer to produce. But beyond the hype, there are questions to answer and challenges to overcome. Case studies will cover various applications and approaches.

2:10pm-2:40pm – Predicting Primary Clarifier Performance with Traditional and Machine Learning Models Speaker: Nick Guho, Carollo Engineers

Historically, various models have been used to predict primary clarifier performance, from simple empirical relationships to CFD. This presentation uses full-scale data to compare the performance of simple traditional models with a suite of machine learning models and develop recommendations for primary clarifier modeling in facility planning and capacity evaluations.

3:40pm-4:10pm – Using Artificial Intelligence to Drive Predictive Analytics in a Cloud SCADA System

Speaker: Justin Starr, Community College of Allegheny County While AI is an exciting technology, it can be challenging for water and wastewater professionals to identify exactly how to implement cutting edge algorithms into collection systems. This session will explore how AI was deployed with an existing SCADA dataset, using models developed and deployed by community college students.

4:15pm-4:45pm – Planning and Building for the Future – Expansion of the Wareham WPCF

Speaker: David Gryger, GHD

Faced with an aging plant and increasing loadings, Wareham, Massachusetts needed to upgrade existing facilities while planning for the future. This required careful engineering of the current project to ensure compatibility with future upgrades, resulting in a road map for improvements to double the capacity over the next 20 years.

UTILITY MANAGEMENT & GOVERNMENT AFFAIRS PROGRAM

Moderator: Mark Pickering

1:00pm-1:30pm – "It's Complicated" The Operator-Engineer Relationship Speaker: Robert Horvat, KLH Engineers

The working relationship between operators and engineers can be complicated and this is particularly true during the design of municipal projects. When the design team actively involves operators, and operators provide thoughtful input into decisions, projects are much more likely to be successful. This presentation examines common misconceptions of each about the other and explores strategies for engagement and success.

1:35pm-2:05pm – Leadership and Management for New Professionals, Including Asset Management Speaker: Ralph E. Johnson, System Design Engineering

In the Leadership and Management for New Professionals and Asset Management presentation we'll compare operator responsibilities to leader responsibilities, and we'll discuss leadership in today's employment market. We'll also cover the importance of asset management implementation as it relates to leadership.

Objectives

- Create an awareness that as a leader there are additional and somewhat different duties and responsibilities compared to operations and maintenance.
- Present a list of leadership, management and supervisor topics that one needs to acknowledge and understand as a utility leader, manager and/or supervisor.
- Present an overview on each topic presented to create an awareness of what responsibilities, skills and duties are involved with being a leader, manager and/or supervisor.

2:10pm-2:40pm – Synergizing Diverse Drivers for Philadelphia's Wastewater Master Plan

Speakers: Samantha Lynn O'Connor; Benjamin Deatrich, Philadelphia Water Department

The presentation will focus on integrated master planning for PWD wastewater plants, addressing critical considerations such as asset management, future ammonia regulations, climate change, and energy management. By integrating these factors, PWD aims to optimize resources, minimize environmental impact, ensure compliance with future regulations, and enhance sustainability and resilience.

3:40pm-4:10pm – DEP Update

4:15pm-4:45pm - DEP Update

STORMWATER PROGRAM

Moderators: Bruce Hulshizer; Gabe Lederman

1:00pm-1:30pm – Using Smart Stormwater Controls to Meet Stormwater Requirements and Preserve the Aesthetic Character of Two Historic Ponds in Harrisburg, PA: An Update and Lessons Learned Speakers: Susan Beck, PE; Claire Maulhardt, PLA, Jacobs

Technical Program Details

This presentation will discuss the implementation of CMAC to optimize stormwater performance within two existing historic ponds. The presentation will share lessons learned on how the system was optimized to maximize stormwater performance and will demonstrate real performance data collected in 2024 demonstrating the system met and exceeded performance targets.

1:35pm-2:05pm – NYC DEP Right of Way Green Infrastructure: Implementing 7 Miles of Precast Porous Concrete Panels in the Gravesend Bay Neighborhood of Brooklyn, NY Speaker: Stephanie Drago, NYC DEP

This presentation will discuss the design and construction of the first NYC area wide precast porous concrete panel contract.

Design includes utility analysis, tributary drainage area analysis, geotechnical investigations, survey, and design. Construction requires coordination with multiple stakeholders and overcoming a wide variety of challenges.

2:10pm-2:40pm – City of Los Angeles' Development of a Tool to Quantify the Benefits of Non-Structural Measures

Speakers: Paul Caswell; Taraneh Nik-Khah, Hazen and Sawyer The City of LA is developing a tool and framework to quantify the human-centric and pollutant reduction benefits of non-structural BMPs and minimum control measures. This presentation will focus on the methodology development and the interactive tool used to inform program investments.

3:40pm-4:10pm – Integrating Public Reporting Systems for Stormwater/MS4 Using GIS Speaker: Andrew Tuleya, ARRO Consulting

Learn how you can leverage GIS for soliciting, processing, and responding to information provided by the public related to stormwater issues. Whether you are an MS4 permit holder or just trying to better manage public information, this presentation will provide you with easy to implement solutions related to stormwater management.

4:15pm-4:45pm – Coordinating Complex Underground Projects Speaker: Maria White, PA One Call System, Inc.

Discover the Pennsylvania 811 Coordinate PA application, an underground project management tool that enables all underground stakeholders to safely manage large and complex underground projects from conception to construction. CPA assists stakeholders to be in compliance with the updated Pennsylvania One Call Law.

TUESDAY MORNING

ARTIFICIAL INTELLIGENCE PROGRAM

Moderators: Anna Pravlochak Monitors: Damian Bernstein/Samantha Schmucke

8:00am-8:30am – Artificial Intelligence 101: Understanding the Basics

Speaker: David Stumph, Next7IT

Artificial intelligence (AI) is transforming the way we interact with technology, from smart assistants to autonomous systems. This presentation offers a beginner-friendly introduction to AI, exploring its fundamental concepts, history, and applications. Attendees will gain insight into how AI works, including machine

Ingenuity that shapes lives[™]

Treatment Facilities | Pipelines | Pump Stations | Stormwater Infrastructure Financing | Construction Services

412.503.4369 gftinc.com | Offices Across Pennsylvania



Technical Program Details

TUESDAY MORNING – AI PROGRAM CONTINUED

learning, neural networks, and natural language processing. We'll also discuss the ethical considerations and future implications of Al advancements. By the end of this session, participants will have a solid foundation in Al and a better understanding of its role in shaping the world around us.

8:35am-9:05am – Artificial Intelligence vs. Machine Learning vs. Predictive Analytics: Understanding the Differences and Connections Speaker: David Stumph, Next7IT

In today's data-driven world, artificial intelligence (AI), machine learning (ML), and predictive analytics are often used interchangeably, but each plays a distinct role in technology and business applications. This presentation provides a clear breakdown of these concepts, explaining how they differ and how they intersect. AI serves as the overarching discipline that enables machines to simulate human intelligence, while ML is a subset that focuses on algorithms that learn from data. Predictive analytics, on the other hand, leverages statistical techniques and ML models to forecast future outcomes. Attendees will gain insights into real-world applications, industry trends, and the impact of these technologies on decision-making. By the end

of the session, participants will be able to differentiate between these concepts and understand their significance in shaping the future of innovation.

9:10am-9:40am – The Legality and Ethics of Artificial Intelligence: Navigating the Future Responsibly Speaker: Lee Stinnett, Salzmann Hughes

Artificial intelligence (AI) is rapidly advancing, raising complex legal and ethical questions that impact individuals, businesses, and society at large. This presentation explores the evolving legal frameworks surrounding AI, including regulations on data privacy, intellectual property, and liability. Additionally, we will examine the ethical challenges posed by AI, such as algorithmic bias, transparency, and the societal consequences of automation. Attendees will gain insight into ongoing debates, emerging policies, and best practices for developing AI responsibly. By the end of the session, participants will be equipped with the knowledge to assess the implications of AI in legal and ethical contexts and contribute to responsible AI governance.

10:40am-11:10am & 11:15am-11:45am –AI at Work: Practical Applications in Equipment Condition Monitoring Speaker: Joseph Lee, Aidentyx

Artificial intelligence (AI) is reshaping condition monitoring in manufacturing, enabling smarter fault detection, predictive insights, and optimized system interactions. This presentation explores the transformative role of AI, highlighting key techniques such as machine learning and generative AI — including Large Language Models — and their practical applications in industrial settings. We will begin by examining essential AI technologies used in manufacturing and their integration into condition monitoring systems. Through real-world examples, attendees will see how AI-driven predictive maintenance strategies are replacing traditional reactive approaches, significantly reducing downtime and costs while enhancing equipment reliability and operational efficiency. By showcasing successful industry implementations, this session will provide practical insights into how AI is modernizing maintenance practices, optimizing production workflows, and driving innovation across the sector. Attendees will leave with a deeper understanding of AI's critical role in advancing manufacturing resilience and performance.

COLLECTIONS SYSTEMS PROGRAM

Pumps

Moderators: Daniel Claus; Roger Lehman; Ella Quinn Various subject matter experts will pump up your knowledge of collection system pump basics, applications, and design considerations as well as operational challenges.

8:00am-8:30am – Pump 101 – Basics

Speaker: Craig Nagler, Xylem

8:35am-9:05am – Pump 201 – Applications Speaker: Noah Dickerson, FlowServe

9:10am-9:40am – Pump 202 – Challenges Speaker: Will Hesse, Envirep

10:40am-11:10am - Pump 301 - O&M

Speakers: Dan Claus, ADS, Jason Donaldson, Riordan, and Charles Hoffman, Envirep

11:15am-11:45am - Pump 301 - O&M

Speakers: Dan Claus, ADS, Jason Donaldson, Riordan, Charles Hoffman, Envirep

ENGINEERING & CONSTRUCTION PROGRAM

Design Fundamentals Moderators: Scott Armbrust; Ben Briston

8:00am-8:30am – How Bad is it? Ranking & Analyzing Commonly Encountered Treatment Plant Corrosion Environments

Speakers: Steve Freed, PE; William Seawell, Induron This presentation will guide the proactive maintenance minded plant operator and engineer on how to address different tanks with different corrosion potentials. It will focus on the water chemistry aspect of corrosion and how that interacts with common coatings systems on all substrate types (steel, concrete, galvanized steel, etc.).

8:35am-9:05am – Screen Resolution: Evaluating, Selecting and Designing the Right Screen for your Wastewater Application Speaker: David Silverman, PSI Process

This presentation will review the planning and design process for screening applications. This includes a broad array of topics including existing screen performance and sizing, determination of objectives; determination of screen size opening and target particle size; estimation of screenings volume; estimation of head losses; screenings collection and disposal, and others.

9:10am-9:40am – The Importance of Process Air: A Case Study on Blower Technology Evaluation and Design Speaker: Danelle Bishoff, Stantec Consulting Ltd.

This presentation reviews different blower technologies and walks through the blower technology selection process for the Fish Creek WWTP as it upgrades from HPO to a conventional BNR.

Technical Program Details

ENGINEERING & CONSTRUCTION PROGRAM (CONTINUED)

It will also highlight major design items including blower control requirements, DO sensors, and air flow control valves for an optimized system.

10:40am-11:10am – Going the Extra Mile in Evaluating Digester Mixing Technologies for Existing Digesters Speaker: Xiao Guo, Carollo

Optimized mixing improves digestion stability and increases digestion capacity. The objectives were to evaluate nine mixing technologies for installation on existing digesters at a California WRRF, determine what retrofit modifications would be required and associated costs using Finite Element Analysis (FEA), and ultimately select a mixing technology for the digesters.

11:15am-11:45am – The Basics of Heating and Air Conditioning at Water and Wastewater Facilities

Speaker: William (Bill) L. Bohner, Jr., PE, ARRO Consulting This presentation shall provide an introduction to the basics of heating and air conditioning of spaces or buildings at water and wastewater facilities. This will include considerations for types and means for heating and air-conditioning a variety of spaces and the available technologies to achieve this.

UTILITY MANAGEMENT & GOVERNMENT AFFAIRS PROGRAM

Moderators: Mark Pickering; Maria White

8:00am-8:30am – Strategies for Assessing & Strengthening Your Authority's Fiscal Health While Maintaining Affordable Rates

Speakers: Melissa Komar; Ryan Killen, Herbert, Rowland & Grubic, Inc.

Curious about how your fiscal health stacks up against neighboring authorities? Discover simple assessments and impactful strategies to evaluate your financial standing, optimize asset use, and engage customers. Learn how to make informed decisions that keep rates low while ensuring long-term financial vitality.

8:35am-9:05am – PA's Evolving Nutrient Credit Trading Program: An Update Speaker: Nickolas Hines

This presentation aims to provide information to utilities that rely on the PADEP nutrient credit trading program as a means for compliance or revenue. Also discussed are steps for securing credits, verifying credits, and registering generated credits, as well

as offering insights into trends in credit availability and cost.

9:10am-9:40am – Funding Urban Stormwater Infrastructure: A Study of Dedicated Stormwater Utilities in Mid-Atlantic Phase I MS4 Jurisdictions

Speaker: Adrielli Bonfanti Pagnoncelli, Morgan State University

This study examines the implementation and financial utilization of stormwater utility fees (SUFs) in Phase I MS4 municipalities across Maryland, Virginia, Pennsylvania, and Washington, D.C. It analyzes SUF revenue generation, expenditure patterns, and fee structures, providing critical insights into urban stormwater management financing and sustainable practices.

10:40am-11:10am – Navigating BABA Act Requirements

Speaker: Brooke Semanchik, Herbert, Rowland & Grubic, Inc. Build America, Buy America (BABA) Act requirements can be found in almost all federally funded projects. Before putting a project out for bid, it is important to understand these requirements, the impact they could have on project design and project costs, and potential effects to the project timeline.

11:15am-11:45am – Where Can I Find Funding?

Speakers: Natalie O'Connor; Tori Morgan, Entech Engineering, inc. Infrastructure funding is critical to this time to address the impending and current regulations. This presentation focuses on the various avenues for funding wastewater projects in Pennsylvania. We will focus on the new and existing funding programs available for wastewater projects, including both grant and low interest loan programs.

IW PRETREATMENT PROGRAM

Moderator: Dave Schlott Jr, Arro Consulting

8:00am-8:30am – Representative Sampling: The Good, The Bad, The Ugly Speaker: Erin McKechnie

This presentation provides an overview of representative sampling in wastewater, focusing on both best practices and common pitfalls. Key topics include sample types and collection techniques for targeted analyses such as oil and grease, volatile organic compounds (VOCs), and PFOS. The session will also cover essential sample preservation methods, chain-of-custody protocols, and the critical role of proper documentation in ensuring data integrity. Attendees will leave with practical insights to improve sampling reliability and compliance.

8:35am-9:05am – Implementing a FOG Management Program using GIS and Automation Speaker: Andrew Tuleya, ARRO Consulting

Learn how collection systems can implement a streamlined approach to FOG management using GIS and other digital technology. Topics include typical elements of a FOG ordinance/ code, management strategies, and streamlining efforts using GIS and automation. The presentation will provide a case study of successful FOG management implementation.

9:10am-9:40am – FOG Programs: How to Develop a Program That Makes Sense for Your Community Speaker: Tori Morgan, Entech Engineering

Fats, Oils, and Grease (FOG) Programs are a systematic approach to cleaning up and preventing FOG from entering the collection system. Since each Collection system is unique, each FOG Program is also unique. We will explain how programs can be specifically crafted to meet the needs of your community.

10:40am-11:10am – Optimizing PFAS Removal: Bench-Scale Evaluation of Four Foam Fractionation Technologies

Speakers: Fabrizio Sabba; Patrick Dunlap, Black & Veatch The presentation will provide an overview of four foam fractionation (FF) technologies for removing PFAS from landfill leachate. FF implementation depends on treatment objectives and an optimal balance of contact time, numerous treatment trains, and additional polishing step may be necessary for meeting regulatory requirements.

IW PRETREATMENT PROGRAM CONTINUED

11:15am-11:45am – Acronym Soup – The Many Types of Spill Plans and When They Apply Speaker: Kara Humes, Entech Engineering, Inc.

If liquids are involved, spills are practically inevitable. Environmental regulations require industries and municipalities to develop and implement various spill prevention/response plans. Plans target protection of different areas/materials. Legal requirements of individual plans also differ. This presentation will help attendees understand the alphabet soup of the spill plan acronyms!

TUESDAY AFTERNOON

ARTIFICIAL INTELLIGENCE PROGRAM

Moderators: Samantha Schmucker Monitors: Mark Wolinsky/Sam Gibson

1:00pm-1:30pm – Cybersecurity and Artificial Intelligence in Wastewater Treatment: Safeguarding Smart Systems Speaker: Jared Kroh- HRG, Inc.

As wastewater treatment facilities adopt AI for efficiency and automation, cybersecurity becomes crucial to protect against threats like data breaches and system vulnerabilities. This presentation explores AI-driven advancements in wastewater management and the cybersecurity measures needed to safeguard smart systems. Attendees will gain insights into realworld applications, risk mitigation strategies, and the role of AI in enhancing both operational resilience and security.

1:35pm-2:05pm & 2:10pm-2:40pm – Panel Discussion: Al in Wastewater Management the Innovations, Challenges, and Future Prospects

Speaker: Panel

Artificial intelligence (AI) is transforming wastewater treatment, improving efficiency, predictive maintenance, and real-time monitoring. This panel discussion brings together experts to explore AI-driven advancements, including automated process optimization, data analytics, and smart decision-making in wastewater facilities. Panelists will examine key challenges such as integration, cybersecurity, and regulatory considerations, offering insights into best practices and emerging technologies. Attendees will gain a deeper understanding of AI's role in enhancing sustainability, operational resilience, and the future of wastewater treatment. This session provides a dynamic discussion on AI's impact, addressing practical applications and its evolving role in modern water management.

3:40pm-4:10pm – Unleashing the Power of Microsoft Copilot: Doing More with Less Speaker: Jared Kroh, HRG, Inc.

In today's resource-constrained environments, organizations must find ways to streamline operations without sacrificing productivity or innovation. This session explores how Microsoft Copilot (Generative AI) can transform the way you tackle administrative tasks, reduce workloads, and enable employees to focus on higher-value activities. By automating document creation, data analysis, meeting summaries, and project management, Copilot empowers teams to do more with less

Technical Program Details

while driving greater consistency and accuracy. Attendees will gain practical insights into implementing Copilot to increase efficiency, optimize workflows, and improve decision-making across their organizations. Join us to discover how AI is redefining the modern workplace.

4:15pm-4:45pm – Summing Up: Key Takeaways

Speaker: Autumn Crawford, Western Butler County Authority This session provides a high level review of the key takeaways for the day, tying them together into a an overview of What Artificial Intelligence has done for us in Wastewater Treatment so far, What the industry is currently working on, and where the future might take us.

COLLECTIONS SYSTEMS PROGRAM

Pumps

Moderators: Elizabeth Cheeseman; Alex King

The afternoon will include a brief recap of the lessons learned in the morning session, and participant teams will work through an exhibitor scavenger hunt to find the best pump for their given scenario. Participants are encouraged to attend the entire day, however, the morning session is not a prerequisite for afternoon participation.

1:00pm-1:30pm - Pump Recap/Issues

1:35pm-2:05pm – Pick the pumps work with vendors

2:10pm-2:40pm – Pick the pumps work with vendors

3:40pm-4:10pm - Come back for discussion

4:15pm-4:45pm – Come back for discussion

ENGINEERING & CONSTRUCTION PROGRAM

Moderators: Maria White; Ben Briston

1:00pm-1:30pm – Effects of Dissolved Oxygen on Nitrifying Communities in Wastewater Treatment Plants: Insights on Microbial Adaptation

Speakers: Fabrizio Sabba; Patrick Dunlap, Black & Veatch This study investigates the behavior of nitrifying communities, including comammox, in wastewater treatment plants with varying nutrient removal and aeration control strategies. The research shows that microbial populations adapted to low DO environments maintain high rates at high DO concentrations, and long SRT operation can favor the persistence of comammox populations adapted to different DO concentrations.

1:35pm-2:05pm – Addressing Emerging NPDES Copper Limits for Wastewater Treatment Facilities Speaker: Taya Kotlyar, PE, GHD

This presentation offers a comprehensive overview of a copper treatment project at Aqua Pennsylvania's 0.6 MGD White Haven WWTP, aimed at meeting newly established NPDES effluent copper limits. It covers baseline effluent sampling, jar testing, full-scale pilot testing, and post construction full-scale copper removal performance data.

Technical Program Details

ENGINEERING & CONSTRUCTION PROGRAM (CONTINUED)

2:10pm-2:40pm – Optimization of Chemical Disinfectant Dose with Application of Integrated Concentration Time (ICT) Dose Pacing: Three Case Studies

Speaker: Baris Kaymak, CDM Smith

Due to the sharp price increase in hypochlorite, PVSC initiated a study to optimize chlorine dose strategy with integrated concentration time (ICT) dose pacing approach. A sitespecific ICT Model was developed using laboratory scale tests. Implementing an ICT dose pacing approach would result in up to 18% chemical cost savings.

3:40pm-4:10pm – Best Steps for Rehabilitating Your Wastewater Tanks Speaker: Christine Gunsaullus, The Tank Queen, LLC

This presentation offers a proven step-by-step guide to rehabilitate wastewater tanks, covering essential topics like inspection, maintaining treatment during outages, budgeting, scheduling, technical specs, permitting, bidding, and construction. Case studies and lessons learned from past rehabilitations will also be shared to help wastewater professionals improve future maintenance efforts.

4:15pm-4:45pm – Construction of ALCOSAN's CSO Bypass and Disinfection Facilities – Where Are We Now? Speaker: Joel Kostelac, PE, BCEE, GHD

As part of their ongoing wet weather compliance program, the Allegheny County Sanitary Authority (ALCOSAN) continues their major plant expansion and upgrade projects. This presentation summarizes the design and focuses on the ongoing construction and constructibility of the ~300 MGD primary effluent bypass and disinfection system central to the facility.

DRINKING WATER PROGRAM

Moderator: Robert Dengler, GFT

1:00pm-1:30pm – Navigating the PFAS Maze – PFAS Treatment Residuals Management

Speaker: Liz Garvey, Stantec

EPA's updated PFAS MCLs is creating an influx of residuals management needs and destruction technologies. Updates to CERCLA/RCRA hazardous designations for PFAS will change outlooks for residuals handling, disposal, cost, and liability. This presentation will summarize latest regulations, disposal options, PFAS destruction technologies, and results of a utility survey for PFAS waste management strategies.

1:35pm-2:05pm – Go with the Flow: Upgrading Phoenixville's Water Intake

Speakers; James Bulicki & Paul Owen Remington & Vernick Engineers

The Phoenixville Water Treatment Plant modernization project upgraded the raw water intake system with passive intake screens, a hydroburst cleaning system, and electrical enhancements. Key improvements included concrete encasement, streambank stabilization, and dewatering measures, ensuring operational efficiency, sustainability, and compliance with Pennsylvania Department of Environmental Protection (PA DEP) standards.

2:10pm-2:40pm – Transforming Water Treatment: Innovative Solutions for Emerging Contaminants

Speaker: Stephanie Cuthbert, PE; Remington & Vernick Engineers McCandless Township Sanitary Authority utilized prudent planning to design a WWTP upgrade elected to Phase the construction of the biological process upgrades consistent with future influent loads. Design efforts to model the process through phasing as well as construction and startup of Phase I will be compared to actual operational data experienced.

3:40pm-4:10pm – Lead Service Line Replacements – A Case Study in Data Management, Private Property Access and Customer Complaint Resolution

Speakers: Stephanie Cuthbert, PE; Christopher Gross, GISP, CFM, Remington & Vernick Engineers

As EPA regulations take effect, utilities face the challenge of tracking, identifying and replacing numerous service lines, with data management being overwhelming. New Jersey utilities, already in the construction phase, have developed methods for inventory, tracking and accessing private properties. This presentation shares lessons and methodologies to streamline compliance and improve customer service.

4:15pm-4:45pm – Unknown Water Service Line Identification One Knock at a Time: Lessons Learned from New Jersey American Water's Service Line Canvassing Program Speaker: Brian Lubenow, CDM Smith

New Jersey American Water has 690,000 water services across 32 systems, including approximately 400,000 with unknown material. Understanding the critical need to identify unknown material services, they began an aggressive canvassing and interior inspection program in 2022. This presentation will focus on the logistics and best practices of this program.

IW PRETREATMENT PROGRAM

Moderator: Dave Schlott Jr, Arro Consulting

1:00pm-1:30pm – AST Filters RCPG Abstract Speaker: Garrett Kenney, AST Filters

AST Filters presents our RCPG (recirculating polygeyser) for wastewater pretreatment. This system can treat BOD, TSS, and Ammonia simultaneously. Our floating bead clarifiers are a fixed film process designed to be low maintenance and with a low operational cost.

1:35pm-2:05pm – Technical Review Criteria/ Significant Non-Compliance (TRC/SNC) Speakers: Andrew Moore; Tori Morgan

Understanding what Significant Non-Compliance and Technical Review Criteria mean to a Pretreatment Program and Industry. How is SNC calculated? What commercial/industrial users are subject to a SNC evaluation? What is TRC and how does it work into determining a compliance status? What happens to an industry that is determined to be in SNC or Preatment program that fails to address SNC? So many questions on determining IPP compliance answered.

2:10pm-2:40pm – PFAS: What we need to know today.... Speakers: Stacy Silva, Tori Morgan; Entech Engineering

3:40pm-4:10pm – Sustainability: What Does it Mean to Small to Large Industrial/Commercial Facilities? *Speaker: Stacy Silva, Entech Engineering*

It seems that everywhere you look, the term "sustainability" is being headlined or referenced. But what exactly is sustainability, and what does it mean for business large and small? Learn how sustainable measures have many benefits for your organization from financial, competitive advantage, the ability to mitigate risks, creation of operating efficiencies and the ability to attract and retain talent. Little changes can make a big difference, no matter the size of your business or organization!

4:15pm-4:45pm – How to Read and Understand a Lab Report Speaker: John Weisman, Suburban Testing Labs

Hear from the experts on how to read and understand a laboratory report. Get valuable insight as to the importance of a complete and accurate Chain of Custody, understand the report Quality Control, notes and definitions, and unit of measure. Why does it all matter and when to ask questions. Results matter and understanding the data is key to ensuring compliance.

WEDNESDAY MORNING

ENGINEERING & CONSTRUCTION PROGRAM

Case Studies & Planning

Moderators: Scott Armbrust; Ben Briston

8:00am-8:30am – Managing Wastewater Residuals: Evaluating Bioenergy Systems Performance and Operational Strategies for Compliance

Speakers: Chris deBarbadillo, Black & Veatch

This presentation will provide an overview of a bioenergy system that combines anaerobic digestion and thermal hydrolysis process to manage wastewater residuals. This will include operational guidance and strategies for maintaining compliance in stringent regulatory environments and discuss impacts of implementing enhanced biological phosphorus removal and balancing bioenergy systems.

8:35am-9:05am – Anaerobic Digestion of Organics: Overview of Two Case Studies for CHP and RNG Resource Recovery Speaker: Dustin Craig, CDM Smith

This presentation will discuss the diversion of organics, such as food waste and the co-digestion of these wastes with anaerobic digestion which generated biogas, a beneficial byproduct at two industry leading facilities, one generating heat & power (CHP) and another producing RNG (Renewable Natural Gas).

9:10am-9:40am – Keeping Granules Happy: Aerobic Granular Sludge Testing at Sand Island WWTP Speaker: Danelle Bishoff, Stantec Consulting Ltd.

Aerobic granular sludge technology testing is underway at the Sand Island WWTP. This presentation will review the results of the three testing phases: 1) acclimate the granules to low strength, high salinity wastewater; 2) test the reactors with two different influent sources; and 3) evaluate the rate of granule formation.

Technical Program Details

10:10am-10:40am – Benefits of Hydrocyclones for WRRF Performance: Better Settling, Improved Nitrification... and Reduced E. coli?!

Speaker: Samir Mathur, CDM Smith

This presentation focuses on design and operational concepts using hydrocyclones to promote sludge densification. This includes a case study and full-scale design at a 30-MGD facility which operates a hydrocyclone on one of its aeration basins and has demonstrated sludge settleability improvements, resilient nitrification performance, and reduced *E. coli* levels prior to disinfection.

10:45am-11:15am – Value Engineering for Small Water & Wastewater Systems, Another Way to Get IIJA/BIL Funding! Speaker: James J. Rhoades, Jr., Benesch

This presentation identifies how Value Engineering (VE) can be used in addressing the critical need for infrastructure in smaller systems. The goal of the presentation is to give attendees new ideas to implement VE methodology to ultimately obtain IIJA/ BIL funding for their water resources projects. Case studies will be reviewed. ◆

STRUCTURE. & INTEGRITY. PITTSBURG



(270) 826-9000 ext. 4601

Certification

PA DEP Operator Certification

The PWEA Annual Technical Conference has been planned in accordance to the requirements of House Bill 183 (Act 11) and application has been submitted to the PA DEP to provide five wastewater operator contact hours. The PWEA is a PA DEP Approved Training Provider and is permitted to issue continuing education credit to water and wastewater operators.

To ensure you meet continuing education requirements, please refer to the Operator Certification 3-Year Renewal Cycle Schedule. IMPORTANT: Contact hours received outside of your renewal cycle will not count toward your requirements.

To comply with accreditation sponsor requirements, the PWEA will require every attendee to check in and out of each half day timeslot by having room monitors or moderators scan your badge QR code.

In order to track your hours you must download an app during registration. More information will come at a later date. You must attend at least 2.5 hours in each half day in order to qualify for contact hours. Each half day session is worth 1.0 contact hour.

In addition to the Conference contact hours, **five workshops have been approved by the PA DEP for additional credit**. These workshops will run concurrently with the Conference and may have extended hours. You will receive credit for either the workshop or the Conference session, depending on what you attend during each timeslot.

Please note: You may only receive credit for attending a specific workshop once during your renewal cycle. DEP will not count the same workshop more than once within a cycle. Please check your records to be sure you have not previously attended one of these workshops within your current cycle.

Continuing Education for Professional Engineers and Other Professionals

PWEA technical sessions are not pre-approved by state boards for licensed professionals. Therefore, it is not possible to guarantee their acceptance for certification purposes. PWEA will issue transcripts based on the attendance information provided from QR scans, which will be available at the Registration Area. Transcripts for professional engineers, geologists, land surveyors, and other professionals will show 3.0 professional development hours (PDH) per half day program. Time will be earned in half-day increments; partial time will not be issued. This time represents actual classroom hours. It is the responsibility of each individual to submit their PDH credit in the format required by their state licensing boards.

Certificates will be processed and emailed approximately one month after the Annual Conference.



Headquarters: Coraopolis, Allegheny County, PA

Branch Offices:

Greensburg, Westmoreland County, PA Albion, Erie County, PA Butler, Butler County, PA Center Township, Beaver County, PA Clarion, Clarion County, PA Dublin, Franklin County, OH Harmar, Allegheny County, PA Kittanning, Armstrong County, PA White Oak, Allegheny County, PA Washington, Washington County, PA

412-264-4400 | info@lsse.com Visit us at www.lsse.com



Center Township Water Authority

Professional Services

MUNICIPAL

- GIS/Mapping/Asset
 Management
- Grants Procurement and Administration
- Green Infrastructure
- Landscape Architecture
 - Wastewater

- Parks and Recreation
- Planning
- Roadway and Pavement
- Site Design
- Stormwater/MS4
- Surveying
- Water

RADAR ISTHEBETTER ULTRASONIC



80 GHz level sensor with fixed cable connection (IP68)

- Accuracy and reliability meet affordability
- Easy Bluetooth setup via the VEGA Tools app for smart devices
- Optional remote display available



All advantages of the radar technology: www.vega.com/vegapuls



PA DEP Certification Exams

The Pennsylvania Water Environment Association (PWEA) is offering PA DEP Operator Certification Exams on different dates at various locations in 2025. Register for your exam(s) through the PWEA online registration system at *pwea.org*. Exam registration fees are: \$75 for PWEA members, and \$125 for non-members. Payment for exams is by credit/debit card only. Check the website for seat availability.

Exam dates and locations - all exam times are 9:00am-1:00pm.

- Tuesday, August 12, 2025 DEP NCRO, Williamsport Office FULL
- Thursday, August 21, 2025 DEP SWRO, Pittsburgh Office FULL
- Tuesday, September 23, 2025 Four Points Sheraton Allentown Lehigh Valley, Allentown
- Wednesday, October 1, 2025 DEP SWRO, Pittsburgh Office FULL

Not a member of PWEA?

Go to www.pwea.org to join online or to download the membership application form. Members receive the PWEA member rate for the PennTec Conference and for PWEA training events.



Member benefits include the *Keystone Water Quality Manager*, a quarterly technical publication containing legislative updates, design/process operations articles, problem-solving case histories, and advance notice of continuing education. This valuable magazine also highlights current technology trends and issues affecting water quality.

You will also receive by email the monthly PWEA e-Newsletter, keeping you up-to-date on the latest water quality news and PWEA events.

If you have questions about PWEA, please contact the PWEA Administrative Office at 717-642-9500, or by email to pwea@pwea.org.



WORLD'S FIRST WASTEWATER PUMPING SYSTEM WITH INTEGRATED INTELLIGENCE

This revolutionary system delivers optimal performance while reducing your total cost of ownership. It also offers unparalleled flexibility and simplicity on a whole new level. You might even say it thinks for itself. We invite you to enter a new era in wastewater pumping with Flygt Concertor.

One powerful solution. Unlimited possibilities.

For more information visit our booth or contact your local Xylem product sales professional.

2330 Yellow Springs Rd Malvern, PA 19355 **610-408-6500**





XYPEX® BIO-SAN®

ENGINEERED FOR CONCRETE IN HARSH SEWAGE ENVIRONMENTS.

Antimicrobial Protection Prevents microbial-induced corrosion (MIC)

Permanent Waterproofing Performs under extreme hydrostatic pressure

9x Less Corrosion Verified by a third-party testing

Self-Healing Reactivates to seal hairline cracks upon water exposure

Visual Detection System (VDS) To verify its presence in hardened concrete

Saves Time Easily added to concrete during batching



. 1.

Concrete Protection and Waterproofing

NET SO 16./22.7 Kg

Scan the QR Code to learn more:



www.xypex.com

Workshop Details

The following workshops are being offered during PennTec 2025 on June 23-25 at the Kalahari Resort. You may add these courses to your PennTec registration, or you may register for individual course(s) separately. You must register in advance for these courses. All courses are limited to 40 attendees, unless otherwise noted.

Monday & Tuesday, 8:00am-5:00pm

Activated Sludge Refresher Course This course is PA DEP Approved for 16.0 wastewater contact hours. Course ID 3884 You must attend both days to earn DEP credit. Partial credit will not be awarded. Instructors: Jeremy Miller, PA DEP; Walter Higgins, US EPA

This course was developed as a preparatory course for the activated sludge certification exam as well as a refresher for certified operators. Students will be engaged in active classroom discussion as well as small group exercises. In advance of the training date, students will be provided with vocabulary and other training material to review before the classroom training. Interactive instruction and handouts explaining the activated sludge process, exam taking skills and practice math drills, general knowledge review, concept reinforcement, confidence building, homework, and a supportive learning environment are included. Registrants should bring a calculator, a notebook and a pen/pencil.

Monday, 8:45am-11:30am

A Laboratory Practices Committee Workshop Laboratory Ethics This course is PA DEP approved for 3.0 drinking water and wastewater contact hours. Course ID 7364 Instructor: Larissa Hoover, Alcosan

This course provides detailed information for laboratory technicians and supervisors on the topic of lab ethics, based on Chapter 252. This course is for employees who need ethics refresher training for the laboratory every 14 months. The course discusses common definitions, state requirements, consequences and prevention of unethical behavior, conflict of interest, ethics policies and agreements, data control and legal defensibility, as well as red flags and data reporting.

Tuesday, 8:00am-11:45am

Responsibilities of Clean Water Professionals "Operator Ethics" This course is PA DEP approved for 3.5 wastewater contact hours. Course ID 7122

Instructors: Erick Ammon, Marc Neville, Kevin Buss, and Brandon Bettinger – PA DEP

This training workshop, titled "Responsibilities of Clean Water Professionals", introduces the Wastewater Operator Code of Ethics. identifies elements of sustainable asset management, reviews cybersecurity and emergency planning for wastewater systems, and provides an overview of the laws, rules, and regulations that impact a certified wastewater operator in Pennsylvania. During the workshop, instructors guide attendees through a group exercise that presents "worst case scenario" conditions at a wastewater treatment facility caused by inadequate operation and maintenance of the facility by the permittee/owner and the certified wastewater operator. Attendees consider the scenario as an "ethical" consulting certified operator, using the information from the training to develop a strategy for effectively communicating existing facility conditions to the permittee and regulatory authorities and present corrective actions to bring the facility into compliance with the requirements set forth in the NPDES Permit and Department rules & regulations. Upon conclusion of this course, attendees will be ready to accept and carry out the responsibilities and rewards of being a Clean Water Professional.

Wednesday, 8:00am-11:45am

A Biosolids Committee Workshop

Solids Handling & Disposal This course is PA DEP approved for 3.5 wastewater contact hours. Course ID 9165 Instructors: Charles Winslow, GHD;

Chris Boyd, Charter Machine; Howard Butler, GHD

The purpose of this course is to provide an overview of current trends in biosolids thickening, processing, dewatering, and disposal. The core topics will include thickening technologies, anaerobic digestion, aerobic digestion, and solids management planning. Dewatering strategies and technologies will also be discussed, as well as biosolids disposal and beneficial use opportunities.

Wednesday 8:00am-11:30am

A Safety Committee Workshop Excavation and Trenching Refresher This course in PA DEP approved for 3.0 drinking water and wastewater contact hours. Course ID 6501 Instructor: Edwin Kauffman, RETTEW Associates

The purpose of this excavation and trenching course is to serve as a refresher for students who have already completed an Excavation and Trenching Competent Person course. Attendees will focus on core topics including justification for training, underground services, electrical hazards, traffic control, and protective systems (shoring, benching, sloping).



SPECIALIZING IN WATER & WASTEWATER EQUIPMENT

MANUFACTURERS REPRESENTED:



- Vertical Turbine Pumps
- Horizontal Split Case Pumps
- Centrifugal End Suction Pumps



- Submersible & Drypit Wastewater Pumps
- Vertical Multistage Pumps
- Submersible Well Pumps
- VFDs, Controls, & Booster Pump Systems
- Dosing Chem Feed Pumps & Systems



- Horizontal Split Case Pumps
- Centrifugal End Suction Pumps
- Vertical In-line Pumps



Direct In-Line Wastewater Pump Systems



- Heavy Duty Wastewater Pumps
- Submersible & Drypit Wastewater Pumps
- Hardened Steel Pumps with Abrasive Solids Handling Capabilities



- Submersible Well Pumps & Motors
- Variable Frequency Drives & Starters



- Trailer & Skid Mounted Bypass Pump Systems
- Vacuum Assisted & Self-priming Pumps
- Centrifugal End Suction Pumps



- Electric Motors
- VFDs, Soft Starters, & Controls
- Custom Built Control Panels

Contact us today to learn more about our Engineered Equipment Solutions

Municipal Maintenance Co. 1352 Taylors Lane Cinnaminson, NJ 08077 (856) 786-9434 equipmentsales@mmc-nj.com www.mmc-nj.com

Exhibit Hall Information

The Exhibit Hall is a very important part of the PennTec Conference. The exhibits will open on Monday at 9:45am and will close on Tuesday at 5:30pm. Visiting the vendors will be informational, educational, and it will also be fun!

Raffle Prizes

Prizes will be raffled at different times throughout the Conference. Attendees registered for the conference will be given raffle tickets, and there will be marked containers placed randomly throughout the Exhibit Hall – one for each prize. Attendees can put as many of their tickets as they'd like in each marked container. Raffle tickets will be drawn in the Exhibit Hall at various times during the Conference. You must be present to win. Exhibitor representatives are not eligible for these drawings.



Exhibit Hall Food Functions

Lunch, morning and afternoon breaks, and the President's Reception will be in the Exhibit Hall on Monday. Continental breakfast, morning & afternoon breaks, lunch, and the Beer & Pretzels/Wine & Cheese Reception will be in the Exhibit Hall on Tuesday.



President's Reception Monday, 4:45-5:45pm

Don't Miss the President's Reception! Join us for an evening of networking and refreshments. Enjoy complimentary beer and snacks while connecting with colleagues and exhibitors.

We look forward to seeing you there!

There is no charge for this event.



Beer & Pretzels/Wine & Cheese Reception Tuesday, 4:45-5:45pm

FREE beer, wine, cheese, and pretzels will be served! Come to the Hall to relax and visit with the vendors.

There is no charge for this event.



Exhibit Hall Bingo

The PWEA Exhibits & Sponsors Committee organized this event for Monday and Tuesday during the Conference.

How It Works:

Conference attendees will receive a Bingo card in their registration packets, along with a list of participating exhibitor names. Each participating exhibitor will be assigned a letter/number from the Bingo cards. Attendees will need to visit the exhibitors in order to have their cards stamped.

Once the squares are stamped horizontally, vertically or on the diagonal, the attendee will then turn in the card to a designated individual or booth just before the last break of each day (Monday or Tuesday) for confirmation. Attendees must be present to win and can only turn in one card, either on Monday or on Tuesday.

Prizes will be awarded to all Bingo winners during the last Exhibit Hall break on Monday and on Tuesday. Winners will also be entered into a Prize Drawing on Monday and on Tuesday.

Car Racing in the Exhibit Hall

The Exhibits & Sponsors Committee is hosting the 3rd Annual Car Racing event!

Hot Wheels cars will be raced down a track within exhibit booths during breaks. Races will be in heats of 6-8 numbered cars. Winner of each heat advances to the final. Each heat winner and the overall winner will receive a gift card.







"Innovative Aluminum Cover Design for Water and Wastewater Applications"

Cover Features

✓ Double Interlocking Construction

67 (Standard) or 37 Wide Deck Planks

20++ 6061-T6 Aluminum Extrusions

√ 50 psf Live Load

√ 400 Lbs. Concentrated Load

√ *L/240 Live Load Deflection Limit*

V Hinged & Non-Hinged Cover Panels

√ Easy Panel Removal

✓ NEBB Leak Test Certified

√ 1-Piece Extruded Handle

✓ Casketed Interlock & Edge Handles

√ Interlock Beam/Support Members

🗸 Santoprene Gaskets

√ Slide Latching System

/ Flush or Top Mount

√ Sturdy Walk-Safe Cover

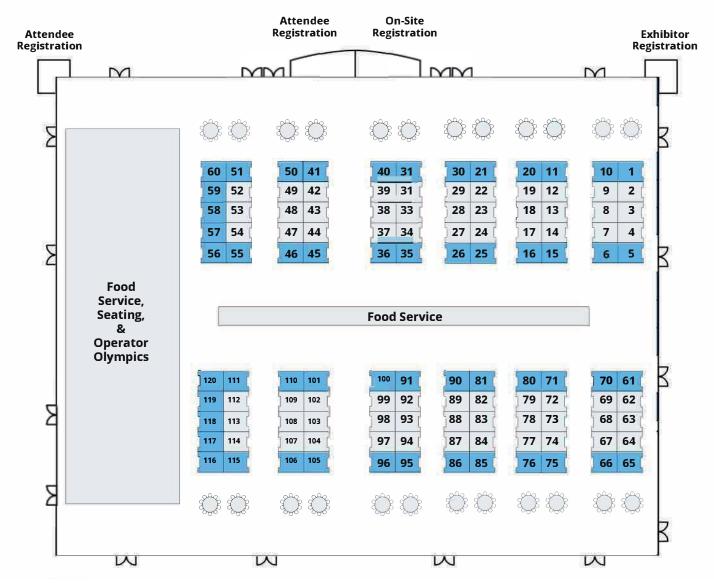
√ Slip Resistant Striations

 $\sqrt{}$ Standard 2-Year Warranty

www.pmwi.net

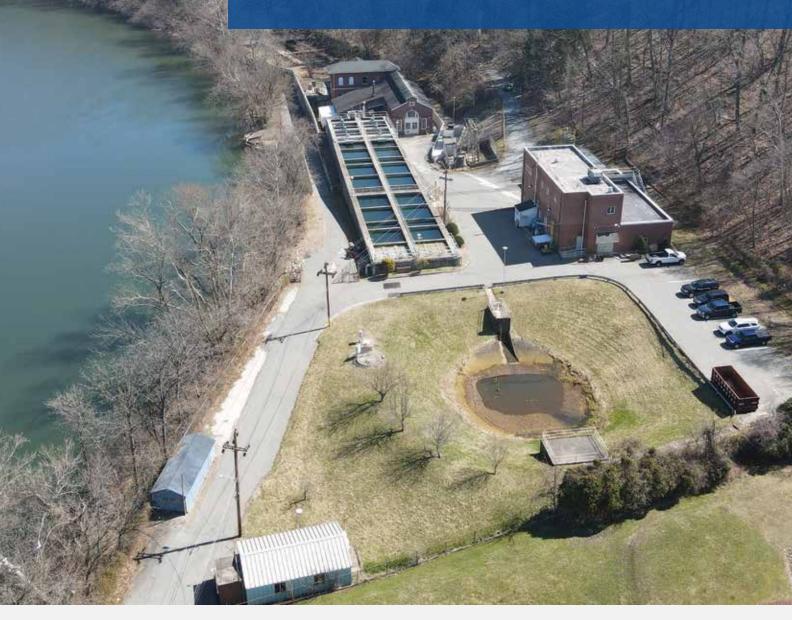
Exhibit Hall Floor Plan

Kilimanjaro Ballroom





WATER & WASTEWATER SOLUTIONS





Excellence • Innovation • Service

RVE provides innovative and costeffective water and wastewater engineering solutions for utilities across Pennsylvania.



rve.com | King of Prussia, Yardley, Pittsburgh, Lehigh Valley, Ardmore



Capture Trash at the Source!



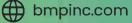
Over 100,000 Installations throughout North America

Our Snout® system has been leading the charge in stormwater management for over 25 years. Designed to last, it captures pollutants at the source and reduces downstream pollution. For optimal performance, add the Bio-Skirt® and Turbo Plate®.

Proven Stormwater Treatment You Can Trust

Don't let trash flow downstream. The Snout® stormwater treatment hood reduces floatables and sediment in storm drains. Pair it with the Bio-Skirt® for enhanced oil capture and the Turbo Plate® to tame high-velocity flows and increase sediment removals. Together, they deliver effective trash capture, sediment control without overcomplicating maintenance.





9 Mathews Drive, Unit A1-A2 East Haddam, CT 06423

Exhibitor Listings

A

A. C. Schultes, Inc.

Eric Fox 813 Colwell Rd. Swarthmore, PA 19081 856-845-5656 eric_fox1@comcast.net Booth 120

ADS Environmental

Daniel Claus 921 Mercantile Dr. Hanover, MD 21076 717-847-2005 dclaus@idexcorp.com Booth 16

Advanced Rehabilitation Technology

Rusty Hesselschwardt 525 Winzeler Dr. , Unit 1 Bryan, OH 43506-8849 419-636-2684 rusty@artcoatingtech.com Booth 81

Arro Consulting

Mike Schober 508 Thorngate Pl. Millersville, PA 17551 717-205-4550 mikeschober@comcast.net Booth 80

AssetGuard

John Lauletta 1567 Zion Dr. New Braunfels, TX 78132 713-504-1764 john.lauletta@assetguardproducts.com Booth 22

Atlantic Coating Consultants/Tnemec Wally Bates

108 Oak Creek Dr., Royersford PA, 19468 610-551-3713 wally@acconsultants.com Booth 89

В

Benesch

James Rhoades 400 Norwegian Plz. Pottsville, PA 17901-7090 570-624-4269 *jrhoades@benesch.com* Booth 12

Brenntag

Christopher Flannery 224 Stayman Rd. Roanoke, VA 24019 540-353-9218 christopher.flannery@gmail.com Booth 62

Buchart Horn, Inc.

Scott Russell 2009 N. Atherton St., Suite 200 State College, PA 16803 814-206-9312 scottrussell@bucharthorn.com Booth 42

С

Certified Health & Safety Services Amy DiFonzo

1902 Taylors Lane, Suite A Cinnaminson, NJ 08077 856-829-4463 amy@certifiedhss.com Booth 94

Charter Machine Company

Christopher Boyd 720 W. Prospect Ave. North Wales, PA 19454-2644 732-589-5574 chrisb@chartermachine.com Booth 56

Colliers Engineering & Design Ron Madison

941 Marcon Blvd., Suite 801 Allentown, PA 18109 610-868-4201 eventsteam@collierseng.com Booth 71

Corrpro

Jim Britt 470 Lapp Rd. Malvern, PA 19355 216-904-9065 jbritt@azuria.com Booth 28

Costream

Christine Orlando 134 West Front St. Berwick, PA 18603 570-520-4600 sales@costream.tech Booth 100

Coyne Chemical Environmental Services

Tim McComas 13006 Falls Rd. Cockeysville, MD 21030 215-785-3000 tmccomas@coynechemical.com Booth 34

CW Sales Corporation

Daniel Midgley 199 South Forrest Ave. Norristown, PA 19403 610-277-6444 dmidgley@cwsalescorp.com Booth 86

D

Denali Water Solutions, LLC Glen Knecht 250 Lucius Gordon Dr., Ste 8 West Henrietta, NY 14586-9662 518-222-5452 glen.knecht@denaliwater.com Booth 29

DN Tanks

Colin Rimel 5502 Silver Blaze Dr. Eldersburg, MD 21784 443-325-4657 colin.rimel@dntanks.com Booth 57

Drv Inc.

Scott Hinsch 1200 Randall Ct. Export, PA 15632 412-247-4816 dshinsch@drv-inc.com Booth 41

Dutchland, Inc.

Isaiah Lasche 160 PA-41 Gap , PA 17527 717-471-8405 ilasche@dutchlandinc.com Booth 114

E

Entech Engineering, Inc. Bryon Killian 201 Penn St. Reading, PA 19601 570-640-6406 bkillian@entecheng.com Booth 50

Exhibitor Listings

Envirep Aqua-Aerobic Park Process

David Lounsbury 3705 Trindle Rd. Camp Hill, PA 17011-4334 815-654-2501 sales@envirep.com Booth 37

Eurofins Environment Testing

Andrea Decola 2425 New Holland Pike, 508 N 25th Street Lancaster, PA 17601 908-809-9243 andrea.decola@et.eurofinsus.com Booth 69

F

Fieldforce

Jon Hnat 6 Four Coins Dr. Canonsburg, PA 15317 724-678-9875 *jwehler@keystoneclear.net* Booth 44

Fisher Scientific

John Bailey 300 Industry Dr. Pittsburgh, PA 15275 412-992-1625 john.bailey@thermofisher.com Booth 72

Flow Assessment Services, LLC

Lucas Chapman 72 Priscilla Ln. Auburn, NH 03032 603-656-9799 Ichapman@flowassessment.com Booth 36

Franklin Energy (FirstEnergy) Sandee Bloom

4115 William Penn Hwy., Suite 204 Murrysville, PA 15668 724-691-6140 sbloom@franklinenergy.com Booth 108

G

G.M.H. Associates of America, Inc. Tony Genniro

5 Chelten Wy., Building 15 Trenton, NJ 08638 609-658-3774 tgenniro@gmhassociates.com Booth 76

GA Industries, a Vag-group Brand Greg Clifford

380 Glade Mills Rd. Valencia, PA 16059-3318 724-776-1020 g.clifford@vag-group.com Booth 35

Gayle Corporation

Wyllys Cass 40 Lloyd Ave., Suite 202 Berwyn, PA 19312 610-296-0970 wcass@gaylecorp.com Booth 116

Geiger Pump And Equipment Co.

Alan Greve 830 Tryens Rd. Aston, PA 19014 610-459-1212 agreve@geigerinc.com Booth 8, 9, 10

George Kelso Company, LLC

Jennifer Renninger 364 Monte-Elma Rd. East Berlin, PA 17316-0743 360-470-4108 jrenninger@kelsocompany.com Booth 110

GFT

Roufai Alio 207 Senate Ave. Camp Hill, PA 17011 717-439-4752 mmehaffey@gfnet.com Booth 31

Gilson Engineering Sales

Jeff Neubert 535 Rochester Rd. Pittsburgh, PA 15237 412-369-0100 timk@gilsoneng.com Booth 26

Golden Equipment Co., Inc. Ross Stafford P.O. Box 873 Mars, PA 16046 800-242-1494 golden4pa@hotmail.com Booth 118, 119

Grignard Company

Roman Wisniews P.O. Box 873 Mars, PA 16046 800-242-1494 odalis.pizza@grignard.com Booth 102

Gwin Dobson & Foreman, Inc.

Steve Gibson 3121 Fairway Dr., Suite 1 Altoona, PA 16602-4496 814-943-5214 sgibson@gdfengineers.com Booth 11

Н

Hach

Dave Unzicker 459 Longleaf Dr. Perkasie, PA 18944 267-245-2141 dunzicke@hach.com Booth 23

Hawkins, Inc.

Melissa Kopka 2381 Rosegate Roseville, MN 55113 612-617-8609 melissa.kopka@hawkinsinc.com Booth 24

Hayward Flow Control

Dave Jeffe 1 Hayward Industrial Dr. Clemmons, NC 27012 336-592-5120 oelezovic@hayward.com Booth 75

Herbert, Rowland & Grubic, Inc. Ella Quinn 369 East Park Dr. Harrisburg, PA 17111 717-564-1121 aclark@hrg-inc.com

Booth 92

Hill Services, Inc. Marilyn Baron 17464 W Bajada Rd. Surprise, AZ 85387-1000 610-704-1804 mbaron@hillishere.com Booth 30





CHAIN & FLIGHT TANK INSPECTION

Learn About Our Eval & Retrofit Program. Contact Us For A Free Inspection In Eastern & Central PA!



SOLUTIONS

Exhibitor Listings

IDEXX Laboratories

Adam Shaw One IDEXX Dr. Westbrook, ME 04092 207-544-0904 adam-shaw@idexx.com Booth 70

Infiltrator Water Technologies

Jessica Stiner 654 4th St. Oakmont, PA 15139-1528 800-221-4436 jstiner@infiltratorwater.com Booth 97

CONVEYANCE

InfoSense, Inc.

Heather McNeil 2102 Cambridge Beltway Dr., Suite D-1 Charlotte, NC 28273 877-747-3245 hmcneil@infosense.com Booth 59

Iron Horse Environmental, LLC

Nick Picozzi P.O. Box 282 Fairview Village, PA 19409-0282 610-709-7986 npicozzi@ihe-llc.com Booth 65, 66

J

Joos Equipment Company Eric Joos P.O. Box 368 Paoli, PA 19301-0368 610-644-5875 ejoos@joosequipment.com Booth 96

K

TREAT

Nut

HYDRA

JND

Kappe Associates

Andrew Buskirk 6198 Butler Pike , Suite 150 Blue Bell, PA 19422-2600 610-927-4474 *info@kappe-inc.com* Booth 48, 49, 51, 52, 53, 54

Keystone Engineering Group, Inc. Jenney Walton

590 Lancaster Ave., Suite 200 Frazer, PA 19355 610-295-1240 jwalton@kegi.net Booth 27

Klh Engineers, Inc.

L

Kevin Hoffman 5173 Campbells Run Rd. Pittsburgh, PA 15205-9733 412-494-0510 khoffman@klhengineers.com Booth 99

Larson Design Group Quay Schappell 1000 Commerce Park Dr. Williamsport, PA 17701 412-216-0757 mcolbaugh@larsondesigngroup.com Booth 117

SCADA co-energy projects DAVEYENCE Nutrient Removal

TUDIES TIONES TI

GDEAR ENGINEERS GDFENGINEERS.COM

SYSTEM EVALUATIONS Rate Studies SCADA Funding Management b ACT 537 PLANNING Uations

Hydra By Conveyand Act 53 Sewer REHAB Treatment System Eva Hydra COLLECTION

LB Water

Ben Reichley 593 S. High St. Selinsgrove, PA 17870 570-374-2355 ben.reichley@lbh2o.com Booth 18

LRM, Inc.

Mark Crawford P.O. Box 244 Hilltown, PA 18927 215-721-4840 mcrawford.lrm@comcast.net Booth 25

LSSE Civil Engineers and Surveyors

Lawrence Lennon 846 4th Ave. Coraopolis, PA 15108-1582 412-264-4400 Ijlennonjr@lsse.com Booth 107

Μ

Maryland Biochemical Co., Inc.

Emily Douglass 712 Tobacco Run Dr. Bel Air, MD 21015-1330 410-734-9100 emily@marylandbiochemical.com Booth 104

Mercer Rubber

David Bloom 350 Rabro Dr. Hauppauge, NY 11788 631-348-0282 dbloom@mason-ind.com Booth 115

Mid Atlantic Biosolids Association Mary Baker

203 Geary Ave. New Cumberland, PA 17040 845-901-7905 mbaker@mabiosolids.org Booth 3

Mid Atlantic Pump & Equipment

Dennis Zepp 228 N. Rte 73 Berlin, NJ 08009-9645 856-768-3880 dzepp@mapeco.com Booth 91

Mid Atlantic Storage Systems, Inc.

Ralph Wawrzyniakowski 30 Sugar Dr. York Haven, PA 17370 717-706-0198 ralph@midatlanticstorage.com Booth 1

Mobile Dredging & Video Pipe, Inc. John Clark

3100 Bethel Rd. Chester, PA 19013 610-497-9500 jclark@mdvpinc.com Booth 112

Mott MacDonald

Chris Henry Two Allegheny Ctr., Nova Tower 2, Suite 1301 Pittsburgh, PA 15212-5406 412-497-2939 christopher.henry@mottmac.com Booth 109

Mr Rehab, LLC

Allen Clark 3 Long Ln. Mechanicsburg, PA 17050 717-697-1242 aclark@azuria.com Booth 15

Municipal Maintenance Company, Inc.

Dan Hennessy 1352 Taylors Ln. Cinnaminson, NJ 08077 856-786-9434 dhennessy@mmc-nj.com Booth 60

Ν

National Gunite

Shane Snyder 111 Roosevelt Blvd. Johnstown, PA 15906 814-533-5780 shane@nationalgunite.com Booth 79

Neo Water Treatment Bill Pettit

6148 Baker School Rd. Trafford, PA 15085-2326 724-309-9720 b.pettit@neomaterials.com Booth 17

Exhibitor Listings

North East Technical Sales

Marc Gradwohl 200 Foulke Ln. Springfield, PA 19064 267-933-6624 *jdezzi@netechsales.com* Booth 105

North End Electric/Environmental Services Corp

Tina Seiwell 1225 N. Keyser Ave. Scranton, PA 18504 570-209-0847 tina.seiwell@northendelectric.com Booth 63

NSI Neal Systems, Inc.

James Sheil 122 Terry Dr. Newtown, PA 18940 215-968-7577 jsheil@nealsystems.com Booth 95

0

Oldcastle Infrastructure Gabe Lederman 10 Symmes Ct. Cranbury, NJ 19028 640-203-0477 gabe.lederman@oldcastle.com Booth 7

Orenco Systems

Mike Saunders 814 Airway Ave. Sutherlin, OR 97479 800-718-4023 searl@orenco.com Booth 98

Ρ

PA Department of General Services – COSTARS Cooperative Purchasing Program Isaiah Smith 1800 Herr St. Harrisburg , PA 17103 717-991-7155 Isaismith@pa.gov Booth 61

PA One Call System, Inc. Maria White 24 Garren Ln. Mountain Top, PA 18707-1131 570-954-3545 mawhite@pa1call.org Booth 64

Exhibitor Listings

Pace Analytical

Julie Silvis 1803 Philadelphia St. Indiana, PA 15701 724-463-8378 julie.silvis@pacelabs.com Booth 77

PaWARN

Mike Snyder 212 Whitetail Terr. Marysville, PA 17053 717-880-1303 mikesnyder@pawarn.org Booth 4

Pennsylvania Municipal Authorities Association (PMAA)

Mandi Glantz 1000 North Front St., Suite 401 Wormleysburg, PA 17043 717-805-7864 glantz@municipalauthorities.org Booth 2

PipeAld

Lauren Kozak 330 Rush Alley, Suite 310 Columbus, OH 43215 614-695-6592 lauren.kozak@pipeaid.com Booth 6

PSI Process

James Connor 901 School St. Moosic, PA 18507-1600 570-677-1919 james.connor@psiprocess.com Booth 32, 33

PW Tech

Chris Hubbard 3705 Trindle Rd. Camp Hill, PA 17011-4334 815-654-2501 sales@envirep.com Booth 39

Pyrz Water – KET

Bob Pyrz P.O. Box 107 Harleysville, PA 19438 215-256-8430 bob@pyrzwater.com Booth 101

R

Radwell

TJ Skymer 1 Millennium Dr. Willingboro, NJ 08046 1-800-332-4336 ext.1109 tskymer@radwell.com Booth 68

Ram Industrial Services, LLC

Mike Presutti 1095 Montour West Industrial Pk., 2850 Appleton Street, Suite D Camp Hill, PA 17011 412-610-5388 mike.presutti@iss-na.com Booth 93

Rausch Electronics USA

Adam Baker 1686 Opportunity Ave. Chambersburg, PA 17201 717-709-1005 abaker@rauschusa.com Booth 113

Reiner Pump Systems, Inc.

Gregg Sermarini 725 Gilbertsville Rd Pottstown, PA 19464 973-347-9000 gsermarini@reinerpump.com Booth 90

Remington & Vernick Engineers Vanessa Nedrick

600 Hamilton St., Suite 320 Allentown, PA 18101 610-329-5801 vanessa.nedrick@rve.com Booth 45

Repair Technology

Scott Carter 430 N. 2nd St., 575 NJ-73 #5 Emmaus, PA 18049 856-701-7681 scarter@belzonareptech.com Booth 21

Riordan Materials Corporation Art Auchenbach

6198 Butler Pike , Suite 150 Blue Bell, PA 19422-2600 610-927-4474 aauchenbach@riordanmat.com Booth 46, 47

S

Sentinel Water Solutions John Van Buskirk 1975 Waddle Rd. State College, PA 16803 888-811-PFAS jvb@sentinel-h20.com Booth 78

SewerAl

Mikayla Davis 1646 N California Blvd., Suite 510 Walnut Creek, CA 94596 586-764-1176 mdavis23@sewerai.com Booth 103

Sherwin-Williams Protective Coatings

Matt Vonderheide 613 Windsor Ln. Flatwoods, KY 41139 717-753-0653 matt.vonderheide@sherwin.com Booth 14

Stone Hill Contracting Co., Inc.

Bob Corvino P.O. Box 1370 Doylestown, PA 18901 215-340-1840 racorvino@stonehillcontracting.com Booth 85

Т

Thaddeus Stevens Heath Edelman 1100 East Orange St. Lancaster, PA 17102 717-725-9623 edelman@stevenscollege.edu Booth 13

The RootX Company

Drew Raffensperger P.O. Box 7626 Salem, OR 97306 503-881-7105 drew@rootx.com Booth 43

Trident Actuators

Michael Sturgill 101 Pine St., Building 8A Holmes, PA 19043 445-456-4115 msturgill@tridentactuators.com Booth 55

Exhibitor Listings

U

Usabluebook Kelsey Ellis P.O. Box 9005 Gurnee, IL 60031 847-377-5162 elangston@usabluebook.com Booth 82

USG Water Solutions

Nick Rapagnani 1230 Peachtree St. NE, Suite 1100 Atlanta, GA 30309 770-313-6388 nick.rapagnani@usgwater.com Booth 19

USG, Inc.

Bill Friedah 1304 Slate Hill Rd. Camp Hill, PA 17011 717-737-6092 bfriedah@usginc.net Booth 58

V

VEGA Americas

Brandon Reams 3877 Mason Research Pkwy. Lebanon, OH 45036 513-515-6465 c.groom@vega.com Booth 106

Veolia Gorman-Rupp

Victoria Bates 3705 Trindle Rd. Camp Hill, PA 17011-4334 815-654-2501 sales@envirep.com Booth 40

Vogelsang Ebara

Tim Smith 3705 Trindle Rd. Camp Hill, PA 17011-4334 815-654-2501 sales@envirep.com Booth 38

X

Xylem Dewatering Beth Grannis

145 Philo Rd. W. Elmira, NY 14903 607-215-0668 elizabeth.grannis@xylem.com Booth 20

Xypex Chemical Corporation

Lucas Mccann 572 Leesville Rd. Jackson, NJ 08527 609-618-8788 Iucas.mccann@xypex.com Booth 111



ARROCONSULTING.COM | 717.569.7021



The Power of Commitment

GHD proudly supports the Pennsylvania Water Environment Association

→ ghd.com

PennTec Sponsors



to Our Loyal Sponsors!

ANNUAL AWARDS CEREMONY RECEPTION

Carollo Engineers Ram Industrial services, LLC LB Water

BEER AND PRETZELS RECEPTION

Riordan Materials Corporation Herbert, Rowland & Grubic, Inc. GFT AC Schultes, Inc. Multiple Hearth Services, IFCO Advanced Rehabilitation Technology Geiger Pump and Equipment Co. Neo Water Treatment

BADGE HOLDERS

Mott Macdonald GFT

COMMUNITY SERVICE PROJECT GOLD SPONSOR

MacDonald Carollo Engineers Herbert, Rowland & Grubic, Inc. Fisher Scientific GA Industries, a Vag-group Brand DN Tanks

CAR RACING

Fisher Scientific

GOLF HOLE

Certified Health & Safety Services Carollo Engineers VEGA Americas Wade Trim National Gunite

LUNCH BUFFET WRA

LUNCH BUFFET

Remington & Vernick Engineers Atlantic Coating Consultants/Tnemec

OPERATOR OLYMPICS

Klh Engineers, Inc. Xylem Dewatering

PRESIDENT'S RECEPTION

Mott MacDonald Hill Services, Inc. Xypex Chemical Corporation Gwin Dobson & Foreman, Inc. Rausch Electronics USA Johnson, Mirmiran & Thompson, Inc.

REGISTRATION BAGS

Remington & Vernick Engineers HDR Engineering, Inc. High Tide Technologies

TAILGATE DINNER AND CORNHOLE TOURNAMENT PLATINUM SPONSORS

Riordan Materials Corporation Hazen and Sawyer Hawkins, Inc.

GOLD SPONSORS

Mott MacDonald Dn Tanks Sherwood Logan

SILVER SPONSORS

Certified Health & Safety Services Orenco Systems Remington & Vernick Engineers Reiner Pump Systems, Inc.

VENDOR MEET AND GREET

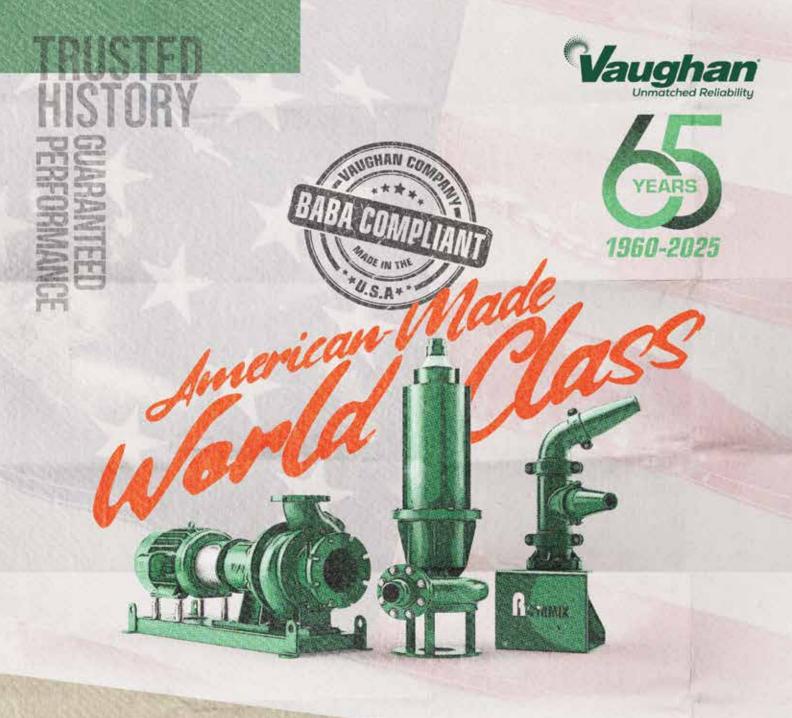
Fisher Scientific Remington & Vernick Engineers Hill Services, Inc. Ram Industrial Services, LLC Riordan Materials Corporation

WINE & CHEESE RECEPTION

Entech Engineering, Inc.

WOMEN IN WATER LUNCHEON

Mott MacDonald Carollo Engineers Hill Services Inc. Remington & Vernick Engineers Atlantic Coating Consultants/Tnemec HDR Engineering, Inc.



Built to last since 1960, Vaughan pumps and systems are available in a variety of sizes and configurations to meet the needs of any operation. For federally funded projects, Vaughan pumps and pumping equipment meet the requirements to receive federal aid under the Build America, Buy America (BABA) act.

- All Vaughan Company products are manufactured in the United States.
- More than 55% of the cost of Vaughan Company products are from components mined, produced, or manufactured in the United States.
- Ask about our free trial program and on-site demos.

Raffle Draw Schedule

MONDAY MORNING BREAK	\$250 Amazon gift card
MONDAY LUNCH	\$200 Lottery Tree
MONDAY AFTERNOON BREAK	\$250 Amazon gift card
MONDAY PRESIDENT'S RECEPTION	Wine Fridge – Dual Zone 18-bottle capacity
TUESDAY MORNING BREAK	\$250 Amazon gift card
TUESDAY LUNCH	\$250 Amazon gift card
TUESDAY AFTERNOON BREAK	\$250 Amazon gift card
TUESDAY BEER & PRETZEL BREAK	Kegerator – Single Tap Beer Dispenser

FROM WASTE TO WONDER: RETTEW'S BIOSOLID SOLUTIONS



OPTIMIZE YOUR BIOSOLIDS SYSTEM

RETTEW can evaluate your current process, minimize waste disposal costs, convert small systems to cycled aerobic digestion, or upgrade biogas to renewable gas and green electricity.



CUT COSTS

RETTEW can help cut your costs by evaluating renewable alternatives, conducting energy audits, and helping secure alternative funding.



Contact us today! rettew@rettew.com

1-800-738-8395 rettew.com | fin PA - OH - WV



You must be present to win! Guests & Exhibitors are not eligible for raffle drawings.

Experience

RAM Industrial Services (Water Technology Division) is located in Pittsburgh, Pennsylvania. RAM manufactures and represents *"Best in Class"* products and services for municipal and industrial water and wastewater treatment applications.

Pumps & Pumping Systems









GRUNDFOS'

Franklin Electric

Pump Repair Services

- 24 / 7 Field Service
- All Manufacturers
- Annual Service Contracts

Sub Contractors

- Installation
- Fabrication
- Welding
- Laser Alignment
- Vibration Analysis
- Start-up & Troubleshooting

UV Disinfection System

Horizontal & Vertical

Aqualitec Screens

- Screentec
- Raketec
- Compactec





Water Technology Division | 1095 Montour Industrial Blvd | Coraopolis, Pa 15108 (412) 610-5388 (724) 695-5366 mike.presutti@iss-na.com

Aqualitec EMO–Sludge Dewatering

- Belt Filter Presses-0.6 to 3 meters
- Combo GBT & BFP-0.6 to 3 meters
- Fully Enclosed Option
- Stand Alone GBT
- Plate & Frame Filter Press

Wastewater Treatment Systems

- Sequencing Batch Reactors (SBR)
- Continuous & Batch Style
- Retrofitting of Existing SBRs
- Conversion of Conventional Style Activated
 Sludge Design
- Extended Aeration Treatment Plants
- Tertiary Filters–Multimedia Downflow Design
- Denitrification Filters (Anoxic Style)
- Membrane Bioreactors (MBR)
- Moving Bed Bioreactors (MBBR)
- Iron & Manganese Filters
- Packaged Surface Water Treatment Systems
- Pre-Engineered, Prefabricated Pump Stations

Control Panels

- NEMA 1, 3R, 4, 4x, 7, 12
- PLC–Programable Logic Control
- VFD's Cutler Hammer, Alan Bradley, ABB
- NEMA Starter
- IEC Starter
- SCADA Systems
- Engineering & Design

Student Research Presentations

Author's Name	Undergrad/Grad	Sponsoring University/College	Advisor	Title	Awards
Manav Baid	Grad	University of Wisconsin-Madison	Daniel R. Noguera	Microaerating Anaerobic Digesters Reduces Hydrogen Sulfide in the Biogas	First Place Presentation
Asa Lewis	Grad	Drexel University	Christopher M. Sales	Investigating PFAS Uptake in Freshwater Algal Microcosms: The Role of Environmental Factors	Second Place Presentation
Allison Fenske	Grad	Penn State University	Nathan Warner	Intermediate Scale Testing of Recycled Concrete Aggregate as an Alternative Neutralizing Material for Acid Mine Drainage Passive Treatment	Third Place Presentation
Catherine Sengstock	Grad	Widener University	Xiaochao Tang	Developing a Low-Carbon Geopolymer Cement Using Sewage Sludge Ash as Precursor	



SERVICE SPOTLIGHT

Pennsylvania Department of General Services

IN-HOUSE WELDING & FABRICATION SERVICES

The BGC, Inc., Water & Wastewater Services Division Team has complete in-house welding and fabrication services available to our clientele. In-house fabrication guarantees competitive pricing at bid time. This will save you money while assuring that your project is completed in your projected schedule.

In-House Welding & Fabrication Services include:

- AWS Certified
- Alloys (Steel, Stainless Steel, Aluminum)
- On-Site Field Services
- 50,000 Sq.ft. Fabrication Shop
- 3D Scanning and Modeling Capabilities
- On-staff CWI
- CNC Pipe & Tube Plasma Cutting
- Plasma Rotary Pipe Cutting
- Solid Works-3D Custom Design Software

Scan here to learn more.



Email: info@bgcwws.com **Web:** bgcwws.com

P.O. Box 55, Skippack, PA 19474 Phone: 215.258.7530 Fax: 215.257.7761

30548 Thorogoods Road Dagsboro, DE 19939 (Mailing Address Only) Phone: 302.613.4418



Fully Bonded & Insured, OSHA Trained & Certified, Complete Turn Key Services

■ SAME DAY EMERGENCY RESPONSE

Available 24/7/365: 844.802.4050



Contact Our Team Today!

Consulting: lucky@bgcwws.com Service: mmilewski@bgcwws.com Estimating: cpurdy@bgcwws.com Engineering: jmoses@bgcwws.com Metals Fabrication: mgrillo@bgcwws.com Electrical Repair: jkashner@bgcwws.com Sewer & Manhole Inspection: zhallman@bgcwws.com

Vendor Presentations

Room	Room Topic and Time Slot	Company	Presenter	Title	Email
African Ballroom Suite 20	Biosolids, Monday, 12:55-1:00pm	Charter Machine Co.	Christopher Boyd	Double Your Cake Solids in Under One Minute	chrisb@chartermachine.com
Salon D	Collection Systems, Monday, 12:55-1:00pm	Municipal Maintenance Co.	Daniel Hennessy	MMC – Service, Repair, Emergency Service, and New Equipment Sales	dhennessy@mmc-nj.com
Salon C	Engineering & Construction, Monday, 12:55-1:00pm	KELSO	Jennifer Renninger	Syntechnics Inc. – Fiberglass Reinforced Plastic Dome Covers	jrenninger@kelsocompany.com
Salon A	Stormwater, Monday, 12:55-1:00pm	MrRehab, LLC	Allen Clark	Trenchless Applications in Sanitary and Storm Sewer Collection Systems	aclark@azuria.com
Salon B	Utility Management & Government Affairs, Monday, 12:55-1:00pm	DGS-COSTARS	Isaiah Smith	COSTARS 101	lsaismith@pa.gov
Salon D	Collection Systems, Tuesday, 7:55-8:00am	Advanced Rehabilitation Technology	Rusty Hesselschwardt	I&I and H2s Protection in Manholes and Wetwells	rusty@artcoatingtech.com
Salon C	Engineering and Construction, Tuesday, 7:55-8:00am	Entech Engineering	Natalie L. O'Connor	Entech Engineering – Niche Services	noconnor@entecheng.com
Salon B	Drinking Water, Tuesday, 7:55-8:00am	Keystone Engineering Group, Inc.	Jenney Walton	KEEPS-Preventative Maintenance	jwalton@kegi.net
Salon A	IW Pretreatment, Tuesday, 7:55-8:00am	Franklin Energy/ FirstEnergy	Sandee Bloom	Capturing Rebates from your Electric Utility Company	sbloom@franklinenergy.com
African Ballroom Suite 20	Artificial Intelligence, Tuesday, 7:55-8:00am	DRV, Inc.	Scott Hinsch	Variable Frequency Drives for Pump Control	dshinsch@drv-inc.com
Salon D	Collection Systems, Tuesday, 12:55-1:00pm	InfoSense, Inc.	Heather McNeil	Acoustic Inspection for Collection Systems	hmcneil@infosense.com
Salon C	Engineering and Construction, Tuesday, 12:55-1:00pm	Maryland Biochemical Company	Emily Douglass	Wet Well Mixing	emily@marylandbiochemical.com
Salon B	Drinking Water, Tuesday, 12:55-1:00pm	North East Technical Sales	David Yankowy	North East Technical Sales – Product Offerings	d3yankowy@netechsales.com
Salon A	IW Pretreatment, Tuesday, 12:55-1:00pm	DRV, Inc.	Scott Hinsch	Variable Frequency Drives for Pump Control	dshinsch@drv-inc.com
African Ballroom Suites 20	Artificial Intelligence, Tuesday, 12:55-1:00pm	Denali Water Solutions	Glen Knecht	Residuals Management	glen.knecht@denaliwater.com
Salon A	Engineering and Construction, Wednesday, 7:55-8:00am	FieldForce Pumping & Power Solutions	Jeff Wehler	Designing Customized Bypass Solutions for Temporary Pumping Applications	jwehler@keystoneclear.net



Advance Your Career in Environmental Science

Earn Your Master's Degree in Environmental Science and Management from Duquesne University



"Every day I apply something that I learned in Duquesne's ESM program and was able to dive right into my job after graduation."

- Dannielle Pratt, MS-ESM '19



rchitectur ngineerim

Your Partner in Innovation

At CDM Smith, we thrive on helping you meet your challenges with solutions that maximize the benefit of advances in technology.

CDM Smith cdmsmith.com

Pittsburgh | Philadelphia | Lancaster | Harrisburg

WATERWASTEWATER ENGINEERING

Today's regulatory and compliance challenges continue to evolve. Contact us to discuss how LDG can assist you with your day-to-day operations, near term and long term needs. Small to large systems, legacy to disruptive technologies, and innovative project solutions are a phone call away.

LDG provides the full spectrum of services for the water/wastewater market assisting clients with day-to-day operations through our numerous on-call retainer contracts. Our approach to each project is the same - we leverage the expertise of our multi-disciplined in-house specialists to provide our clients with high quality, economical solutions.

www.larsondesigngroup.com | 570.323.6603

- Larger, multi-million-dollar wastewater and water treatment facility capital projects
- Water purification and distribution
- Sewer water collection and treatment
- Pipeline systems
- Treatment plants
- Filtration systems
- Pump stations
- Treatment systems
- Reservoirs
- Holding tanks
- Force mains
- Grant writing
- Funding assistance
- Operations Management
- Contract Operations
- Asset Management/Valuations
- Capital Planning
- User Fee Evaluations

Committees

2024-2025 Board of Directors

William LaPorte, President James Degnan, First Vice President Vanessa Nedrick, Second Vice President Linda Leopold, First Past President Kara Humes, Second Past President Dean Miller, Secretary Treasurer Autumn Crawford, Professional Operators Director Carolyn Klunder, Young Professional Director Douglas Pike, First Federation Delegate David Brown, Second Federation Delegate

2025 Conference Committee

James Degnan, Committee Chair Vanessa Nedrick, Committee Vice-Chair Robert Dengler, Program Chair Marilyn Baron, Exhibitors & Sponsors Chair Chris Boyd, Exhibitors & Sponsors Vice Chair

2025 Exhibitors & Sponsors Committee

Marilyn Boyd, Chair Chris Boyd, Vice Chair Arthur Auchenbach Nicole Brown James Degnan Eric Fox Eric Joos Jennifer Kintzer Jason Marie Lori Miller Natalie O'Connor Cheryl Paulin James Protin **Brian Rogers** Julie Silvis Garrett Washington Maria White

Program Committee

Robert Dengler, Committee Chair Matt Warfel, Committee Vice-Chair Garrett Stoy, Committee Vice Chair Jenna Bishop Elizabeth Cheeseman Autumn Crawford Glenn Debernardi James Degnan Holly Frederick Ryan Gentzler Chris Henry Carolyn Christy Klunder Michael Kyle William LaPorte Margaret Miller Nicholas Modany Christina Morgan Ronald Newhouse Mark Pickering **Richard Valiga** Nathan Walker Meredith Welle Charles Winslow Qian Zhang

Editorial Committee

Donnie Simpkins, Chair Benjamin Deatrich N. Peter Fleszar Sean Furjanic Chris Henry Jennifer Kintzer Brian Lubenow Dean Miller Mark Pickering David Ritchie Karl Shellenberger Justin Starr David Toth Meredith Welle

Mike Nelson Consulting developed a unique program called FLEX PACK

This is a new way to prepare for the DEP Exam. You can mix the following options throughout the course:

- Attend in-person training
- Attend through live zoom
- Watch the class recordings

Prepare for the certification exam anywhere in PA. To learn more go to *www.mikenelsonh2o.com* (information is on the home page).

Call the office 215-354-5532 or email us mnelsonh2o@aol.com.

2





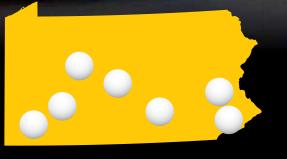
iii

coreandmain.com

WE'RE ALL ABOUT Pennsylvania

When you need dependable service in the middle of the night, the eye of the storm or the center of town, you need the waterworks experts at Core & Main.

A Leading Specialized Distributor of Water, Wastewater, Storm Drainage and Fire Protection Products, and Related Services



Bentleyville 724-239-2063

Latrobe 724-539-2900

DuBois 814-637-5851

State College 814-357-3130

Harrisburg 717-938-8693

Allentown 610-481-9979

Plymouth Meeting 610-275-7400

Local Knowledge



Annmarie Whalen Incoming Executive Director annmariewhalen@pwea.org

Breyana Fulton Deputy Executive Director breyanafulton@pwea.org

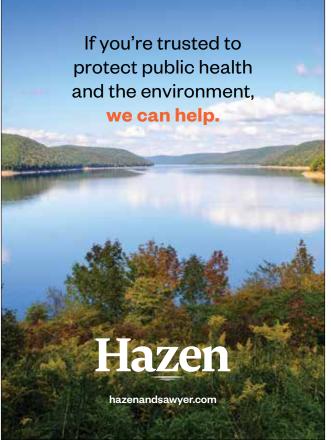


Event Director ashleymohn@pwea.org

www.pwea.com

717-642-9500

PO Box 796, Harrisburg, PA 17108





Use Paper Responsibly

Today's forest industry is working hard to become one of the greenest industries on earth.

Paper is an essential part of human civilization. While we all use and depend upon electronic communications, it is easy to ignore that it comes at an environmental cost. Worldwide spam email traffic creates greenhouse gases equivalent to burning two billion gallons of gasoline yearly, with numbers rising. More than \$55 billion in toxic e-waste material is thrown away every year in the US alone, with a recycling rate of only 20% compared to 64.7% for paper.

No industry is perfect. But the paper industry has made, and continues to make, huge investments in environmental responsibility. Specifying and buying paper from certified sources ensures the continuation and growth of carbon absorbing forests. Using paper with appropriate amounts of recycled fibre helps preserve forests, conserve energy, and maximize fibre usage through paper lifecycles.

Save the Date

PennTec20026

June 15-18, 2026

Hershey Lodge 325 University Dr Hershey, PA 17033

97TH ANNUAL TECHNICAL CONFERENCE & EXHIBITION



2026 Call for Abstracts

97th Annual Technical Conference & Exhibition (PennTec)

Hershey Lodge 325 University Drive Hershey, PA 17033 June 15- 18, 2026

Technical and case study presentations are the lifeblood of PennTec. If you have some experience in the fields of Biosolids, Collection Systems, Engineering, Construction, Government/Regulatory Affairs, Industrial Waste Treatment, Laboratory Practices, Operations, Safety, Stormwater, or Utility Management, the Pennsylvania Water Environment Association (PWEA) invites you to submit your topic for PennTec 2026.

Experience or case studies from some of the smallest municipalities often become the most popular, so please do not think that your project is too small to interest your fellow professionals.

Abstracts of 300 words or less should describe the subject matter with enough detail to allow evaluation of the proposed topic.

Session presentations will be in 30-minute blocks including time for questions.

Abstract submittals will only be accepted electronically in WORD format. **Submission details and the abstract submittal form will be posted on the PWEA website in August.** You will be asked to identify which of the Technical Programs would best fit your topic. Submissions should be emailed to: *abstracts@pwea.org.*

No travel or assistance funds are available for speakers. Speakers are responsible for all of their own transportation and lodging expenses. Discounted speaker registration fees will be offered for the day of the presentation or for the full conference.

Questions should be directed to *abstracts@pwea.org*.

PUBLISH A BOOK WITH WEF

Become an author for the Water Environment Federation (WEF) – a leading publisher on topics such as wastewater, stormwater, water reuse, energy, utility management, and many other water quality topics. Water Environment Federation[®] the water quality people[®]

WEF is currently seeking authors to assist in the development of new publications, including titles on new research and titles suitable for supplemental course use. The following topics are of particular interest:

- Fundamentals of Wastewater Microbiology
- Fundamentals of Activated Sludge Processes
- Sustainability
- Microconstituents
- Water-Energy-Nutrient Nexus

Ready to Share Your Expertise? To learn how WEF can help you become an author and share your expertise, visit accesswater.org/authors.

Job Board

PWEA

Do You Know About PWEA's Job Board?

PWEA's Job Board connects candidates with employers seeking to fill open positions. Employment positions submitted to PWEA are viewable on the PWEA Website at any time. Visit *www.pwea.org* and click on the "News & Info" tab; then select "Job Board – Open Positions."

ITHE EFFECTIVE WATER PROFESSIONAL: eadership. Communication.

Leadership, Communication, Management, Finance, and Governance

Soft Cover. 288 pages Order No. P150005 Member Price: \$124.00 List Price: \$155.00



To Order: Online: www.wef.org/ShopWEF Call: 1.800.666.0206

THE EFFECTIVE WATER

PROFESSIONAL

Leadership, Communication, Management, Finance, and Governance

> Water Environment Federation the water quality people

TRAINING THE OPERATOR OF THE FUTURE

Wastewater Treatment Fundamentals manuals, online courses, study guides, and trainer's kits create a cutting-edge training series designed to educate current and future generations of water-quality professionals.

START LEARNING TODAY TO BECOME THE OPERATOR OF THE FUTURE.



www.wef.org/WWTF

TRAINING FOR THE OPERATOR OF THE FUTURE



WASTEWATER TREATMENT FUNDAMENTALS I LIQUID TREATMENT

Manufacture AINC

White And

WASTEWATER TREATMENT FUNDAMENTALS II SOLIDS HANDLING AND SUPPORT SYSTEMS

Your Access to Water Knowledge

- Enhance Your Industry Skills
- Facilitate Lifelong Learning
- Champion Productive
 Relationships

STUDENT MEMBERSHIP BENEFITS

- WEF Dues \$20 plus local Member Association dues
- Free registration for WEFTEC, WEF Conferences, and WEF Webcasts
- Save 50% off of the member price on WEF technical manuals and books
- Eligibility for the \$25,000 Canham Scholarship (postgraduate only)
- Access to national network of water professionals through WEF student chapters and WEF Member Associations and the WEF Career Center

- Enrich Your Leadership Potential
- Increase Awareness
 Recognition in Your Field
- Reach Your Career Goals

YOUNG PROFESSIONAL MEMBERSHIP BENEFITS

- WEF Dues \$49 plus local Member Association dues
- Special WEFTEC registration rate
- Eligibility to join the WEF Students and Young Professionals Community
- Special WEFTEC activities, geared to meet the needs of Young Professionals

Available to water quality professionals with five or fewer years of work experience in the industry and who are under 35. This program is available only to new member applicants and WEF Student members. Valid for three consecutive years of WEF membership.



Advertiser Product & Service Center



The Pennsylvania Water Environment Association Conference Program is made possible by the companies listed below that have included their important messages on our pages. We thank them for their support of the PWEA and its range of publications. We encourage you to contact them when making your purchasing decisions.

COMPANY	PAGE
A&H Equipment	21
Aqua-Aerobic Systems, Inc.	17
ARRO Consulting, Inc.	61
Best Management Products, Inc.	54
BGC, Water & Wastewater Services	67
BissNuss, Inc.	13
Buchart Horn, Inc.	20
Carollo Engineers/Chemistry	11
CDM Smith	69
Century Engineering, A Kleinfelder Company	66
CHA Consulting, Inc.	32
Core & Main	71
Coyne Environmental Services	10, 18
CP Engineers	31
Duquesne University – Environmental Science and Management	69
Entech Engineering, Inc.	27
Envirep/TLC	IFC
Environmental Engineering & Management Associates, Inc.	70
Flomatic Valves	6
GA Industries	20
Gannett Fleming	38
Gayle Corporation	25
Geiger Pump and Equipment Co.	57
GHD	61
Gwin Dobson & Foreman, Inc.	58
Hawkins, Inc.	12
Hazen and Sawyer	72
HDR	22

СОМРАНУ	PAGE
Herbert Rowland & Grubic, Inc. (HRG)	16
High Tide Technologies	IBC
Industrial Furnace Company	26
Industrial Service Solutions	65
Kappe Associaties, Inc.	5
KLH Engineers, Inc.	14
Lakeside Equipment Corporation	3
Larson Design Group	69
Lennon Smith Souleret Engineering, Inc.	44
M.E. Simpson Co.	23
Mike Nelson Consulting/ Danica Consulting & Training Services	70
Mott MacDonald	28
Municipal Maintenance Company	49
Pittsburg Tank & Tower Group, Inc.	43
Pleasant Mount Company	51
PumpMan Pittsburgh	19
Reiner Pump Systems	4
Remington & Vernick Engineers, Inc.	53
RETTEW	64
Riordan Materials Corp.	OBC
Rochem Americas, Inc.	29
Synagro Technologies, Inc.	66
Vaughan Company, Inc.	63
VEGA Americas, Inc.	45
Whitman Requardt and Associates, LLP	24
Xylem Water Solutions USA, Inc.	46
Xypex Chemical Corporation	47
Zoeller Company	15

View. Manage. Control. Anytime. Anywhere.



Remote Terminal Units (RTUs) Collect Individual Site Data



Real-Time Data Transmits to High Tide Servers Securely Stored in the Cloud

- Cost-effective SCADA System
- Real-time monitoring from any device
- 24/7/365 Customer Service/Tech Support
- Premium Cybersecurity: SOC-2 Type II Compliant
- Flexible Connectivity Options (Celluar, Satellite, Ethernet)
- Solar RTU Options
- Dual SIM Automatic Fail-Over (AT&T/Verizon)
- Verizon Frontline Certified



High Tide's SCADA Platform Viewable on any

Internet–Connected Device

PENNTEC 2025 GUEST SPEAKER



USING ARTIFICIAL INTELLIGENCE TO DRIVE PREDICTIVE ANALYTICS IN A CLOUD SCADA SYSTEM

With over a decade of experience in building custom AI and advanced tech solutions, Justin Starr, CEO of High Tide Technologies, helps companies solve problems and make their operations more efficient.



JUSTIN STARR CEO, High Tide Technologies

htt.io Contact Sales: Sales@htt.io









Tel: 215.628.9936 Fax: 215.628.9979





Riordan Proudly Represents:

Amwell/E&I Corporation clarification & grit systems AquaTurbo aerators & mixers (fixed & floating) CBI Walker egg shaped anaerobic digestion systems DeLoach degasification, forced & induced draft aeration Dupont Memcor membrane filtration Elgin intake screens

EDI (Nexom) diffused aeration systems, screens, filters Engineered Fluid, Inc. (EFI) packaged water stations Flygt (a xylem brand) submersible pumps, mixers Ford Hall launder brush systems Franklin Miller grinders and screens FRC Systems dissolved air flotation units GNA CSO stormwater & CSO technologies Galene packaged water & wastewater systems Greener Day Solutions multidisc dewatering press Inovair single stage turbo blowers Ishigaki, Inc. rotary screw presses Kaeser rotary lobe & screw PD blower systems KLA Systems jet aeration & mixing systems Kubota USA membrane bioreactors LCI Corporation biosolids dryers Merit Media Systems sludge drying beds Noreva nozzle check valves Primozone ozone generation systems Pulsed Hydraulics, Inc. big bubble mixing systems Pumpcon package PS controls & buildings PureAir Filtration odor control systems RedZone collection system inspection & mapping ROTO Pumps USA progressive cavity pumps S&N Airoflo floating aerators & brush rotors Spirac screw conveyors & headworks equipment TomCO2 carbon dioxide feed systems Walker Process clarifiers, digestion systems



Sales Staff

Art Auchenbach Augie Koloras Tom Rainier Tom Miles Jason Donaldson Henry Hood Scott Carl, Jr.

> Offices Locations

Blue Bell, PA Reading, PA York, PA Baltimore, MD

Proud Supporter of:



Riordan Materials, a DXP Company Water & Wastewater Treatment Equipment

<u>A</u> to <u>Z</u> - Riordan has you covered!

From <u>A</u>mwell to <u>Z</u>impro, Riordan has over 100 years collective experience representing the industry leaders in water and wastewater equipment and technologies.

Our mission is to provide quality, cost effective solutions for our clients, while providing the best technical support services available before, during, and after installation. We are proud to represent the premiere line of products for water treatment, wastewater treatment, odor control, solids handling, pumping, and biosolids processes. Our history of consultative sales, combined with our outstanding platform of equipment, provide you the best alternatives available.

At Riordan we're not just sales.....

.....we're solutions.