2027 Call for Content



wefevents

RESIDUALS AND BIOSOLIDS TREATMENT TECHNOLOGY CONFERENCE

The Residuals, Biosolids, and Treatment Technology Conference brings together professionals advancing innovative solutions in wastewater treatment, resource recovery, and biosolids management. As we launch this year's call for content, we invite industry leaders to share practical lessons, emerging technologies, and forward-thinking strategies that support a more sustainable and resilient water sector.

We welcome abstracts and proposals from utilities, consultants, technology providers, researchers, regulators, academics, and industry partners on topics including treatment optimization, resource recovery, nutrient management, energy efficiency, emerging contaminants, beneficial reuse, and innovative treatment technology.

Join us in shaping a dynamic 2027 program that advances practical solutions and drives the future of water.

How to Submit

For submission tips and best practices visit our **Submission Guidelines.**
All submission types should be submitted via **https://ww5.aievolution.com/wef/**
Paper or email submissions will not be accepted.

Questions? Email all questions to: rbittconf@wef.org

Call for Content Timeline

SEPT.
Call for Content Opens

NOV.
Nov. 9th: Submission Deadline

DEC.
Workshop submitters notified of acceptance or rejection.

JAN.
Abstract and session proposal submitters are notified of acceptance or rejection status.

MAR.
Final technical paper/extended abstract due for accepted abstract authors.

APR.
April 27-30 RBTT Conference in Milwaukee

Submission Types



WORKSHOP

Due: 9:00 AM ET / November 9, 2026

Accepted workshops submissions will become half-day or full-day pre-conference events. Workshop facilitators will be expected to work alongside WEF Staff to produce an interactive workbook for all workshop participants.

Agendas must consist of a cohesive theme or topic with the goal of encouraging knowledge exchange among session participants.

Description should not be longer than 9,000 characters (approx. 1,000 words).

Proposal speakers and facilitators must have diversity of utilities, organizations, backgrounds, and experiences. Meaning the session should not all represent the same utility, consulting organization, or manufacturer.

INDIVIDUAL ABSTRACT

Due: 9:00 AM ET / November 9, 2026

Accepted abstract submissions will be paired with 1-2 other individual abstract submissions to develop one technical session. Accepted speakers will be expected to coordinate with fellow session speakers.

Must include an author, co-author, and maximum of two speakers.

Abstracts shall be no longer than 9,000 characters. Tables, graphics, and/or images will not count towards this number and are submitted separately from the abstract text within our system.

Some accepted abstract speakers will be expected to participate in interactive activities during the technical session to help facilitate adult learning.

SESSION PROPOSAL

Due: 9:00 AM ET / November 9, 2026

Accepted session proposal submissions will become a full 90-minute technical session. Proposal facilitators will be expected to coordinate with WEF staff and conference planning committee members to finalize session agenda.

Must include a maximum of three speakers, two facilitators, and complete agenda (90-minute session). Agendas must consist of a cohesive theme or topic with the goal of encouraging knowledge exchange among session participants.

Description should not be longer than 9,000 characters (approx. 1,000 words).

Proposal speakers and facilitators must have diversity of utilities, organizations, backgrounds, and experiences. Meaning the session should not all represent the same utility, consulting organization, or manufacturer.

Submission Review Criteria



Reviewers will provide each submission with a score between 1–100 (1 = lowest, 100 = highest). Each focus area has five criteria that reviewers will use in the scoring process. When submitting, please keep the following criteria in mind.

Research & Academia

- Originality
- Research Rigor
- Clarity of Hypothesis
- Contribution to Field
- Quality

Process & Technology Development

- Originality
- Research Rigor
- Project Status
- Contribution to Field
- Quality

Applied Technology & Projects

- Innovation in tech
- Deployment Status
- Technical Depth
- Impact Potential
- Quality

Focus Areas

Submitters will be able to choose a maximum of one focus area.

- Research & Academia
- Process & Technology Development
- Applied Technologies & Projects
- Operations & Maintenance

Submission Topics



Biosolids Land Application
Biosolids land application remains the most common method of biosolids disposal in many regional areas including in the heart of the Midwest. Submissions are invited focused on the land application of wastewater biosolids, case studies, best practices, operational challenges, and creative solutions. We welcome insights from utilities, researchers, consultants, and regulators that demonstrate measurable outcomes, address evolving challenges, and showcase practical solutions for safe and effective land application programs.

Contaminants of Concern (non-PFAS)
Emerging contaminants, including microplastics, azoles, quaternary ammonium compounds, Inhibitory compounds, pharmaceuticals, pesticides, or herbicides can have a negative impact on the environment or human health. Submissions can include investigations on fate, monitoring, operational impacts, pathways of degradation, treatment, regulatory considerations, and future outlooks on various contaminants.

Decentralized Systems & Small to Mid-size Utility Cases Studies
Small and mid-size utilities face unique operational, regulatory, and resource challenges. Submissions should highlight decentralized systems and real-world utility case studies, including planning, implementation, operation and maintenance, compliance, lessons learned, and innovative solutions that improve system performance and community outcomes.

Digestion (aerobic, anaerobic, and other stabilization processes)
We invite abstracts that showcase advancements, research findings, and real-world experience in aerobic, anaerobic digestion (or other stabilization processes) for wastewater solids and organic residuals. Submissions may cover process optimization, digester design, co-digestion strategies, organics diversion programs, capacity expansion, biogas enhancement, foaming or struvite control, sidestream treatment, and integration with downstream biosolids processes. Topics of interest include feedstock management, pretreatment technologies, process modeling, nutrient and carbon impacts, energy recovery, greenhouse gas reduction, and approaches for achieving energy-neutral or energy-positive operations. Case studies demonstrating measurable performance improvements, innovative partnerships with haulers or commercial organics generators, and lessons learned from full-scale facilities are strongly encouraged.

Fugitive Emmissions and GHGs
Water resource recovery facilities treat wastewater by utilizing biological processes, in turn emitting large quantities of fugitive gases negatively impacting air quality. Fugitive gases encompass compounds such as carbon dioxide, methane, and nitrous oxide. Submissions may revolve around pathways and quantification of fugitive emissions, regulations, monitoring, mitigation in the liquids and solids processes, and innovative methods to capture and treat emissions.

Innovative and Advanced Treatment for Achieving Limit-of-Technology Performance
As discharge limits tighten and resources become increasingly constrained, water utilities face the challenge of meeting regulatory requirements while addressing water scarcity. This session seeks submissions that explore concepts designed to push the boundaries of technology performance. Topics may include integrated approaches for achieving ultra-low discharge limits, enabling water reuse applications, and positioning utilities for next-generation treatment solutions. Contributions highlighting practical strategies, novel technologies, and implementation at any scale—laboratory, pilot, or full-scale—are encouraged.

Odor Control, Safety & Public Outreach
Water resource recovery facility owners use various public outreach strategies to address odors, noise, safety, truck traffic and construction concerns. Submissions on odor control can include a combination of prevention, containment and/or treatment strategies for hydrogen sulfide (H2S) and other volatile organic compounds (VOCs).

PFAS
Per- and polyfluoroalkyl substances (PFAS)have drastically changed biosolids management and the wastewater treatment sector overall. Submissions can include investigations on fate, monitoring, treatment (conventional and emerging treatment technologies), regulatory considerations, impacts on biosolids land application, case studies, and more

Submission Topics



Practical Application of Digital Water, AI & Modeling Strategies
Digitalization and advanced analytics are redefining water treatment. Submissions are invited to demonstrate practical and applied innovations leveraging real-time data, automation, and intelligent modeling. Key areas of interest include but are not limited to, data treatment, sensor technologies, data-driven, hybrid, and mechanistic modeling, digital twins, artificial intelligence, biokinetic and compartmentalized CFD solutions.

Process Intensification – BNR Pathway Optimization (EBPR, Anammox, SND, etc.)
Water utilities are increasingly leveraging process intensification to enhance biological nutrient removal while minimizing footprint and resource demands. Submissions should highlight innovations and case studies related to EBPR, shortcut nitrogen removal, simultaneous nitrification denitrification, and other advanced nutrient management strategies, including laboratory, pilot, and full-scale applications.

Process Intensification – Improved Solids Separation (Densification, MBR, etc.)
Advancements in solids separation technologies are enabling utilities to increase treatment capacity, improve effluent quality, and optimize operations. Submissions should focus on innovative approaches to improve solids separation such as densification, MBRs, and other related technologies, with lessons learned from laboratory, pilot, or full-scale implementation.

Resource & Energy Recovery (nutrients/carbon diversion/biogas/bioenergy, including thermal & other renewables)
Wastewater resource recovery facilities provide utilities many opportunities for resource and energy recovery or on-site utilization. We invite abstracts that explore innovative approaches to resource and energy recovery in wastewater and biosolids systems, with a focus on nutrient capture and/or sequestration, biogas production, treatment, and utilization, and emerging thermal (heat recovery), solar, or other renewable energy sources and technologies. Case studies, lessons learned, and cross-sector collaborations that demonstrate measurable opportunities for resource recovery are encouraged.

Sidestream Treatment / Solids Recycle Streams
Biosolids processing can generate liquid flows containing high nutrients which must be managed or treated before returning to the liquid treatment process. Submissions may include lab-scale, pilot-scale or full-scale examples of conventional nitrification/denitrification, deammonification, nitritation/denitritation, bioaugmentation, physical/chemical treatment or other innovative technologies.

Sidestream Treatment / Solids Recycle Streams
Solids separation in both sludge thickening and sludge dewatering remains essential for the downstream process efficiency and intensification. We invite abstracts focused on both practical experience with case studies and technological advancements in solids separation processes. Submissions may highlight equipment performance, polymer and chemistry optimization, process control strategies, operational troubleshooting, innovative technologies, pilot testing results, and approaches to improving reliability and solids or cake quality. Case studies demonstrating measurable performance improvements, cost or energy savings, operational lessons learned, or integration with downstream processes are especially encouraged.

Thermal Processes (thermal drying, incineration, pyrolysis, and gasification)
We invite abstracts highlighting research, full-scale experience, and emerging innovations in biosolids thermal treatment and destruction technologies. Submissions may address thermal drying systems, multiple-hearth and fluidized-bed incineration, pyrolysis, gasification, or other high-temperature processes that transform biosolids into energy, heat, or value-added products. Topics of interest include process optimization, emissions control, energy recovery, carbon footprint reduction, residuals management, permitting and regulatory challenges, technology comparisons, and lifecycle or cost evaluations. Case studies demonstrating real-world performance, startup and commissioning lessons learned, or integration of thermal systems into broader solids-handling strategies are strongly encouraged.