

## CONTINUING EDUCATION FOR OPERATORS- ASHLAND

### Ashland Bus Depot

99 15<sup>th</sup> Street

Ashland, KY, 41101

Presented by

### Kentucky Rural Water Association

April 28-29, 2026

All times Eastern Daylight Time

**Tuesday, April 28, 2026**

**DW-6hrs WW- 3hrs**

#### Session 1

8:00am – 9:00am

#### Energy Efficiency

Jason Pennell, Kentucky Rural Water Association

**Core Content: H6- Energy Efficiency/Energy Conservation at W/WW Facilities**

**(DW/WW-1 hr)**

This session introduces Kentucky water and wastewater operators to key energy efficiency principles relevant to treatment, distribution, and collection systems. Participants will gain an understanding of how energy is used throughout system operations, identify common sources of energy loss, and explore practical methods to improve efficiency in pumps, motors, aeration systems, and daily operations. The session emphasizes actionable, operator-level strategies that support cost-effective performance, system reliability, environmental stewardship, and alignment with Kentucky Division of Water expectations and industry best practices.

#### Session 2

9:00am-10:00am

#### Water Tank and Tower Inspections

Dan Morrow, Maguire Water

**Core Content: G16- Storage**

**(DW 1 hr)**

This session provides an overview of water tank and tower inspections, including inspection types, key components and areas to evaluate, and industry best practices. Participants will learn how to identify common issues, understand inspection frequency recommendations, and recognize conditions that may impact system performance and water quality.

The session also highlights how routine inspections serve as the foundation for developing effective maintenance plans that protect these critical and high-value assets within the distribution system.

#### Session 3

10:00am-11:00am

#### Metering Technology





Tim Bailey, Consolidated Pipe & Supply

**Core Content: G11-Metering**

**(DW-1 hr)**

This session explores modern water metering technologies and how they are transforming the way utilities measure, monitor, and manage water usage. Participants will review the evolution of metering systems—from traditional mechanical meters to advanced metering infrastructure (AMI) and smart water networks. The session covers key principles of meter operation, data collection, communication methods, and integration with utility management systems. Participants will also examine how real-time data supports leak detection, demand forecasting, and improved customer engagement, along with important considerations for meter selection, installation, calibration, and ongoing maintenance.

Kentucky Rural Water Association

1151 Old Porter Pike  Bowling Green, KY 42103  Ph: 270.843.2291  Fx: 270.796.8623  [www.krwa.org](http://www.krwa.org)

**11:00-12:00**                      **Lunch**

**Session 4**

**12:00pm – 1:00pm**

**Emerging Contaminants**

**Chloe Brantly, Kentucky Rural Water Association**

**Core Content: H25 Surface Water/Groundwater/Watershed Protection**

**(DW/WW-1 hr)**

This session provides an overview of emerging contaminants in water and wastewater systems, including pharmaceuticals, personal care products, PFAS (per- and polyfluoroalkyl substances), microplastics, and other synthetic compounds found in surface water, groundwater, and wastewater.

Participants will review common sources, key characteristics, and environmental behavior of these contaminants, along with current monitoring approaches and treatment technologies used to detect, manage, and reduce their presence in water systems.

**Session 5**

**1:00pm –2:00pm**

**Lead and Copper in Schools**

**Eileen Miller, Kentucky Division of Water**

**Core Content: G5 Drinking Water Standards and Rules**

**(DW-1 hr)**

This session provides an overview of lead in drinking water within Kentucky schools and the role of the Water Infrastructure Improvements for the Nation (WIIN) Grant Program in addressing this important public health concern. Participants will review common sources of lead, understand the health impacts of exposure—especially for children—and recognize conditions that may increase risk.

The session also outlines Kentucky’s voluntary lead testing program, including proper sampling procedures, interpretation of results, and appropriate corrective actions to reduce lead exposure and protect public health.

**Session 6**

**2:00pm-3:00pm**

**Drinking Water Updates**

**Eileen Miller, Kentucky Division of Water**

**Core Content: H18 – Regs (CWA/SDWA, State & Local such as Operator Certification Requirements), NPDES Permit Requirements, Compliance**

**(DW/WW-1 hr)**

This session provides an overview of current and upcoming regulatory updates impacting water and wastewater utilities. Participants will review PFAS considerations for both drinking water and wastewater, including anticipated limits and available treatment technologies for removal.

The session also covers changes to the Lead and Copper Rule for drinking water systems, as well as nutrient limits and other emerging contaminant requirements for utilities operating under Kentucky Pollutant Discharge Elimination System (KPDES) permits.

**Wednesday, April 29, 2026**

**DW-6hrs WW- 4hrs**

**Session 7**

**8:00am – 9:00am**

**Cyber Security**

**Jason Pennell, Kentucky Rural Water Association**

**Core Content: H5 – Emergency Response Planning & Security Training**

**(DW/WW-1 hr)**

This session introduces Kentucky water and wastewater operators to cybersecurity fundamentals relevant to utility operations and aligned with Kentucky Division of Water expectations and federal guidance. Participants will review common cyber threats facing water and wastewater systems and understand the operator's role in protecting operational technology (OT) and supervisory control and data acquisition (SCADA) systems.

The session also covers practical steps for identifying, preventing, and reporting cyber incidents, with an emphasis on protecting critical infrastructure, maintaining system reliability, and supporting regulatory compliance and emergency response efforts.

**Session 8**

**9:00am-10:00am**

**Sampling and Lab Procedure (Part 1 of 2)**

**Johnny Osborne, Pace Analytical**

**Core Content: F35- Sampling & Lab Analysis; D16 -Sampling/Analysis**

**(DW/WW-1 hr)**

This session provides an overview of proper sampling techniques essential for maintaining water and wastewater quality, safety, and regulatory compliance. Participants will review correct sampling methods, chain of custody procedures, and key principles of sample preservation, handling, and documentation. The session also identifies common sources of error that can impact data reliability in the field.

**Session 9**

**10:00am-11:00am**

**Sampling and Lab Procedure (Part 2 of 2)**

**Johnny Osborne, Pace Analytical**

**Core Content: F35- Sampling & Lab Analysis; D16 -Sampling/Analysis**

**(DW/WW-1 hr)**

This session focuses on laboratory analysis processes and the interpretation of results. Participants will review commonly used analytical methods, quality assurance and quality control (QA/QC) practices, and applicable regulatory requirements. Emphasis is placed on ensuring data accuracy and applying best practices for interpreting and reporting laboratory results.

**11:00am-12:00pm**

**Lunch**

**Session 10**

**12:00pm – 1:00pm**

**How Phosphates Work**





**Bob Cashion, S4 Water Sales**

**Core Content: F14 Corrosion Control; G2 Corrosion Control**

**(DW-1hr)**

This session provides an overview of phosphate chemistry and its application in water distribution systems. Participants will learn how orthophosphate functions as a corrosion inhibitor by forming protective scales that help reduce lead and copper release into drinking water. The session also highlights key operational

**Kentucky Rural Water Association**

1151 Old Porter Pike  Bowling Green, KY 42103  Ph: 270.843.2291  Fx: 270.796.8623  [www.krwa.org](http://www.krwa.org)

considerations, including dosing practices, system monitoring, and factors that influence corrosion control effectiveness within the distribution system.

### Session 11

1:00pm –2:00pm

#### Exercising Your Valves and Hydrants

**Bob Cashion, S4 Water Sales**

**Core Content: G8 Hydrants, Valves, Exercising Programs**

**(DW-1hr)**

This session provides an overview of valve and hydrant exercising as a key component of water distribution system maintenance. Participants will learn the purpose and benefits of routine exercising, including improved system reliability, maintained operability during emergencies, and reduced risk of asset failure.

The session also covers best practices, safety considerations, and proper documentation, with an emphasis on how routine exercising supports water quality, fire protection, and regulatory compliance.

### Session 12

2:00pm-3:00pm

#### Building Sustainable Water and Wastewater Systems

**Brittany Ditmer Kentucky Rural Water Association**

**Core Content: H15 Plant Optimization: Continue Process Improvement/Sustainability/Asset Management/Statistical Process Control Techniques**

**(DW/WW 1-hr)**

This session provides licensed water and wastewater operators with an overview of sustainable practices that support system reliability, operational efficiency, and regulatory compliance. Participants will explore strategies for proactive asset management and learn how to incorporate resiliency planning into daily operations.

Emphasis is placed on practical approaches that help utilities optimize performance, extend asset life, and adapt to changing conditions while maintaining dependable service.





## SPEAKER BIOS

**Robert K. (Bob) Cashion** is a Nationally Certified Water Technologist, he holds class IV Water & Wastewater operators licenses in several states and has been providing water & wastewater related training for over 3f years, he is the Business Development Manager for 54 Water Sales & Services, and is involved extensively in operations and maintenance issues of filtration systems and water quality assessment projects. He is an active member in the AWWA and NRWA and various State associations where he has won several outstanding educational leadership awards. He has a BS degree in Environmental Health & Technology from Missouri Southern State University and a graduate of the Water & Wastewater Technical College, Neosho, MO.

**Dan Morrow** Has more than eight years of experience in the water industry, with specialized expertise in potable water storage tanks—including elevated water towers—and protective coating systems. As a Consultative Sales Manager, Dan partners with clients to develop effective, long-term solutions.

**Chloe Brantley** joined Kentucky Rural Water Association as the Source Water Specialist in January, 2023. Before joining KRWA Chloe worked for the U.S. Army Corps of Engineers as a National Environmental Policy Act (NEPA)

**Kentucky Rural Water Association**

1151 Old Porter Pike  Bowling Green, KY 42103  Ph: 270.843.2291  Fx: 270.796.8623  [www.krwa.org](http://www.krwa.org)

specialist in support of their projects and missions in the Ohio River basin. Previously her work experience included working as a supervisor of the Water Supply Section at the Kentucky Division of Water for 6 years which included the source water and wellhead protection and planning, source water protection assistance, water supply planning, water withdrawal permitting, and drought monitoring programs. Chloe holds a Master of Science degree in Ecology and Climate Change from Utah State University and a Bachelor of Science in Agriculture and Natural Resources and Sustainability and Environmental Studies from Berea College.

**Brittany Ditmer** has been working in the water and wastewater industry since 2012. She began her career as a Water Treatment Operator and Drinking Water Microbiology Analyst, where she gained hands-on experience with daily operations and the real-world challenges faced by utility operators.

She later served as an Environmental Scientist Advisor with the Kentucky Division of Water, working in the Municipal Planning section of the Water Infrastructure Branch. In that role, she focused on planning and funding assistance for municipal water and wastewater systems across the state.

Brittany is now in her third year with the Kentucky Rural Water Association as a Water Quality Action Specialist in the Decentralized Wastewater Technical Assistance and Training Program. In this role, she provides technical assistance, training, and planning support to rural, small, and disadvantaged communities, helping improve the sustainability and performance of wastewater & water systems.

**Johnny Osborne** is a Manager, Laboratory at Pace Analytical, specializing in analytical laboratory operations and quality assurance. Based in Pikeville, United States, they have a diverse background in the research and development industry. With expertise in managing complex laboratory workflows, Johnny plays a vital role in ensuring the accuracy and reliability of Pace Analytical's testing services. They have successfully transitioned from a previous role as a Marketing Representative at McCoy & McCoy Laboratories, leveraging their technical knowledge and customer service skills to drive business growth.

**Tim Bailey** works with Consolidated Pipe & Supply assisting utilities with water metering technologies and distribution system solutions. His experience includes mechanical meters, advanced metering infrastructure (AMI), system integration, and the use of metering data to improve water accountability and operational efficiency for utilities.

**Eileen Miller** has been working for the DOW since January 2024 as an environmental scientist advisor. She holds degrees in chemistry and environmental management as well as certificates in hazardous materials and emergency response. She is currently a chemical officer in the Kentucky Army National Guard. Prior to working in drinking water she worked as a laboratory analyst for Battelle at the Blue Grass Army Depot and in the biotechnology field.