

CONTINUING EDUCATION FOR OPERATORS

Cadiz Renaissance Center

49 Jefferson Street

Cadiz, KY 42211

Presented by

Kentucky Rural Water Association

April 14-15 2026

All times Central Daylight Time

Tuesday, April 14 2026

DW-6hrs WW- 4.5hrs

8:00am – 9:00am Sampling and Lab Procedure
Angela Mullins, Pace Analytical

Core Content: A4 - F35- Sampling & Lab Analysis; D16 -Sampling/Analysis
(DW/WW-1 hr)

Accurate sampling and laboratory analysis are essential for ensuring the quality, safety, and regulatory compliance of water and wastewater systems. This course provides an overview of proper sampling techniques, chain of custody protocols, and analytical methods used in both field and laboratory settings. Participants will review key principles of sample preservation, handling, and documentation, as well as common sources of error that can affect data reliability. The session will also cover quality assurance and quality control (QA/QC) practices, regulatory requirements, and best practices for interpreting and reporting laboratory results.

9:00am-10:00am Restoring Flow & Eliminating Waste in Water and Wastewater
Shannon Elam, North Marshall Water District

Core Content: H17– Problem Solving/Troubleshooting/Decision Making
(DW/WW-1 hr)

This session introduces AquaLean, a Lean-based operational framework designed specifically for water and wastewater utilities. Participants will learn how to improve system performance by restoring “flow” across processes, communication, and team dynamics. The course emphasizes identifying root causes of inefficiencies—such as unclear expectations and communication gaps—and provides practical strategies to reduce rework, strengthen leadership, and improve overall organizational effectiveness.

10:00am-11:00am Cybersecurity for Utilities
Mathew Folker, ISTT

Core Content: H5 – Emergency Response Planning & Security Training
(DW/WW-1 hr)

As utilities become more reliant on digital systems, cybersecurity is critical to protecting infrastructure and operations. This session provides an overview of current cyber threats, including ransomware, phishing, and vulnerabilities within control systems. Participants will gain practical guidance on securing IT and operational technology (OT) environments, developing incident response plans, and fostering a culture of cybersecurity awareness within their organization.

11:00am-12:00pm Lunch

Kentucky Rural Water Association

1151 Old Porter Pike Bowling Green, KY 42103 **Fx:** 270.796.8623 **Ph:** 270.843.2291 www.krwa.org

12:00pm-1:30pm Communications: Day to Day Basics
Pete Conrad, Kentucky Rural Water Association
Core Content: H3-Community/Public Relations/Compliant Response
(DW/WW-1.5 hrs)

Effective communication is essential for both internal operations and public trust. This session focuses on building strong communication practices within utility teams and with customers. Participants will explore techniques for clear messaging, active listening, and managing difficult conversations. The course also emphasizes the importance of developing a consistent communication strategy that improves teamwork, enhances customer interactions, and supports organizational success.

1:30pm-3:00pm Lead Service Line Inventory, Now What?
Pete Conrad, Kentucky Rural Water Association
Core Content: G4 Distribution Systems; G5 Drinking Water Standards and Rules
(DW 1.5 hrs)

This session provides a practical roadmap for implementing requirements under the Lead and Copper Rule Improvements (LCRI). Participants will learn how to develop and maintain a compliant service line inventory, create lead service line replacement plans, and meet key regulatory deadlines. The course covers updated definitions, material classifications, public notification requirements, and strategies for inventory validation and long-term compliance through 2034.

Wednesday, April 15, 2026
DW-6hrs WW- 6hrs

8:00am-9:00am Water Wastewater Analysis (Part 1 of 2)
Bobby Young, Hach Company Core
Content: F35 – Sampling and Lab Analysis; D16-Sampling Analysis
(DW/WW 1 hr)

This session introduces common laboratory analyses performed by water and wastewater operators. Participants will review testing methods, equipment operation, calibration procedures, and best practices for accurate analysis. The course also introduces emerging technologies that improve efficiency and reliability in laboratory operations.

9:00am-10:00am Water Wastewater Analysis (Part 2 of 2)
Bobby Young, Hach Company Core
Content: F35 – Sampling and Lab Analysis; D16-Sampling Analysis
(DW/WW 1 hr)

This continuation builds on Part 1 with deeper application of testing procedures and interpretation of results. Participants will gain additional insight into troubleshooting analytical processes and ensuring data quality to support operational and regulatory decision-making.

10:00am –11:00am Emerging Contaminants
Chloe Brantley, Kentucky Rural Water Association

Core Content: H25 Surface Water/Groundwater/Watershed Protection
(DW/WW-1 hr)

This session provides an overview of emerging contaminants such as PFAS, pharmaceuticals, personal care products, and microplastics. Participants will learn about sources, environmental behavior, and potential impacts on water and wastewater systems. The course also highlights current monitoring approaches and treatment technologies used to detect and manage these contaminants.

12:00pm – 1:30pm Emerging Contaminants of Concern
Chris Klotter, Kentucky Rural Water Association

Core Content: H18 Regs(CWA/SDWA, State & Local such as operator certification requirements), NPDES Permit Requirements, Compliance
(DW/WW-1.5 hr)

This session focuses on regulatory and operational challenges related to emerging contaminants, particularly PFAS. Participants will explore anticipated regulatory changes, compliance considerations, and treatment options. The course also addresses evolving nutrient limits and their impact on wastewater utilities operating under KPDES permits.

1:30pm– 3:00pm Nutrient Enrichment of Streams and Its Impact on Kentucky Utilities
Chris Klotter and Jason Pennell, Kentucky Rural Water Association

Core Content: H18 Regs(CWA/SDWA, State & Local such as operator certification requirements), NPDES Permit Requirements, Compliance
(DW/WW-1.5 hr)

This session examines the causes and impacts of nutrient enrichment in Kentucky's waterways. Participants will learn how excess nutrients contribute to algae blooms and water quality challenges affecting both drinking water and wastewater systems. The course also reviews regulatory responses, emerging nutrient limits, and practical strategies utilities can use to address these challenges.

SPEAKER BIOS

Jason Pennell has been with the Kentucky Rural Water Association since August 2017 and currently serves as Education Coordinator. His water and wastewater career began in 2005 with Veolia Water in Whitesburg, Kentucky, where he progressed through roles including meter reader, treatment plant operator, laboratory manager, chief operator, and Operations Manager. He later served as a Utility and Regulatory Investigator with the Kentucky Public Service Commission. Jason holds multiple Kentucky certifications, including Class IIIA Water Treatment, Class II Water Distribution, Class II Wastewater Treatment, and Class II Collection System Operator. He is also NASSCO-certified in Pipeline and Manhole Assessment and holds a Utility Management Certification from the National Rural Water Association.

Pete Conrad has worked in the water and wastewater sector since the late 1990s, with extensive experience in utility operations, planning, and management. He previously served as Superintendent of the Henderson County Water District, where he oversaw system operations, regulatory compliance, and customer service. Prior to that role, Pete worked as an infrastructure planner with the Green River Area Development District, assisting water and wastewater systems with project development, funding, and long-term planning. His experience includes working closely with utility leadership, engineers, regulators, and local officials to support system sustainability and performance.

Chloe Brantley joined the Kentucky Rural Water Association in January 2023 as a Source Water Specialist. She previously served for six years with the Kentucky Division of Water, where she supervised programs related to source water protection, wellhead protection, water supply planning, water withdrawal permitting, and drought monitoring. Chloe also worked with the U.S. Army Corps of Engineers supporting environmental planning efforts in the Ohio River Basin. She holds a Master of Science in Ecology and Climate Change from Utah State University and a Bachelor of Science in Agriculture and Natural Resources with a focus in Sustainability and Environmental Studies from Berea College.

Bobby Young is the Regional Sales Manager for Kentucky with Hach Company, where he works closely with water and wastewater utilities to support laboratory analysis and water quality monitoring solutions. With decades of experience in the water industry, Bobby has worked with utilities across the region to implement analytical equipment, improve testing accuracy, and support regulatory compliance. His background includes extensive involvement in water quality instrumentation and operator training.

Angela Mullins is the Commercial Growth Representative for Pace Analytical Services. Eleven years ago, she started her career at McCoy & McCoy Laboratories, now Pace Analytical Services, as a Sample Receiving Technician. Angela has held several positions within the laboratory including Accounts Receivable Specialist, Project Manager, Quality Analyst, and her current role, Commercial Growth Representative. In this role, she works with current clients and potential clients to issue pricing for budgetary purposes, coordinate with the lab on new and existing projects, and exhibit and present at conferences in KY, IN and TN. Angela has been a resident of Western KY her entire life and played college basketball at Murray State University. Angela is the proud mother of two wonderful children.

Shannon Elam is the Chief Executive Officer of North Marshall Water District in Kentucky. He has extensive experience in utility operations and system management, with a focus on improving efficiency and performance in water utilities. Shannon developed the AquaLean framework to help utilities streamline operations, reduce waste, and strengthen organizational effectiveness. As a Certified Lean Six Sigma Black Belt, he applies continuous improvement principles specifically tailored to water and wastewater system operations.

Chris Klotter is a Wastewater Technician for Kentucky Rural Water Association. He provides on-site technical assistance and training to small rural municipal wastewater treatment utilities. His experience also includes reviewing and analyzing industrial wastewater discharge monitoring reports and treatment systems; coordinating and implementing industrial sampling; performing chemical and bacteriological tests on collected samples; inspecting industrial pretreatment facilities; permit writing and surcharge billing; and supervising laboratory personnel.