Kentucky Rural Water Association

Helping water and wastewater utilities help themselves

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APR 4 2017

Public Service Commission

March 31, 2017

Ms. Talina R. Mathews, Executive Director
Public Service Commission
P. O. Box 615
Frankfort, KY 40602-0615

Dear Ms. Mathews:

Case No. 2017-00162

Kentucky Rural Water Association (KRWA) will host its Operator EXPO on Tuesday and Wednesday, May 23-24, 2017. This session will be held at the Hardin County Fairgrounds in Glendale, Kentucky, and will offer a maximum of ten hours of continuing education credit for water district commissioners.

A training summary/timed agenda is enclosed that includes a description of the topics and brief bios for the speakers. Tuesday's sessions will offer up to four (4) hours of training. On Wednesday, attendees can earn a maximum of six (6) hours of training credit. KRWA has also submitted this training to the Kentucky Board of Certification of Water Treatment & Distribution System Operators. A copy of the application is included.

With this letter and enclosures, Kentucky Rural Water Association respectfully requests that this training be approved for up to ten (10) hours of continuing education credit for commissioners as referenced in regulation 807 KAR 5:070. If additional information is needed, please do not hesitate to contact our office.

Sincerely,

Janet Cole

Janet Cole
Education Coordinator
j.cole@krwa.org

Enclosures
(Original and 10 copies)

3251 Spring Hollow Avenue · Bowling Green, KY 42104 · Phone 270.843.2291 · Fax 270.796.8623
www.krwa.org

Training Sponsor: **Kentucky Rural Water Association**
Session Title: **2017 Operator EXPO**
Date: **May 23-24, 2017**
Location: **Hardin County Fairgrounds, Glendale, Kentucky**

Learning Objective: The objective of these sessions is to introduce processes and procedures that will enhance operations of water and wastewater utilities. Through classroom instruction and small group demonstrations, attendees will gain knowledge of products, services and procedures that will add to their knowledge and have a positive impact on job performance.

Criteria for Training Credits: Attendees will be granted credit for actual time attending training sessions. The EXPO will offer a total of 14 hours for drinking water and 13 hours for wastewater; however, the maximum number of credit hours that can be earned will be ten (10) hours for drinking water and ten (10) hours for wastewater. An individual sheet will be given to attendees to record their presence at each session. In order to receive continuing education credit, this sheet will be stamped by KRWA personnel after the completion of each session and turned in at the close of the EXPO

TRAINING SUMMARY/TIMED AGENDA

Tuesday, May 23, 2017

Session 1 – Site D 12:00 p.m. – 1:00 p.m. 1.0 hr. DW/WW
Topic: **Laboratory Analysis for Water and Wastewater**
Presenter: **Lance Williams, Hach Company**
Description: This session will cover a number of analyses typically performed by water operators in water and wastewater utilities. Topics will include the methods for running the analyses, how the analytical equipment operates, calibrations, and steps involved for completion of the analyses. Also included will be different types of inline automated analytical devices used in water and wastewater treatment plants such as inline turbidimeters, dissolved oxygen, and chorine analyzers and the care and maintenance of these devices.

Session 2 – Site D 1:10 p.m. – 2:10 p.m. 1.0 hr. DW/WW
Topic: **Laboratory Analysis for Water and Wastewater (continued)**
Presenter: **Lance Williams, Hach Company**
Description: This session is a continuation of Session 1.

Session 3 – Site D 2:20 p.m. – 3:20 p.m. 1.0 hr. DW/WW
Topic: **Portable Flow Meters for Validation or Calibration - Know the Difference**
Presenter: **Jeff Merman, Automatic Controls Company**
Description: Clamp-on ultrasonic meters are the most misunderstood meter as a management tool. Ultrasonic meters can be a great trouble shooting tool and can even be used to calibrate certain devices. However, they can also get utilities in trouble when they are misused. This session teaches the use of meters in wastewater & drinking water utilities for proving flow and where calibration may be acceptable.

Session 4 – Site D 3:30 p.m. – 4:30 p.m. 1.0 hr. DW/WW
Topic: **Vibration Analysis**
Presenter: **Jeff Merman, Automatic Controls Company**
Description: This session will cover new technologies in vibration analysis for pumps and motors. New technology that allows vibrations emanating from pumps and motors to be used to check installation quality will be discussed. This technology is used to check older motors to catch maintenance problems before they become critical and is useful in predicting possible equipment failure.

Wednesday, May 24, 2017 (Half hour concurrent sessions run from 8:00 a.m. – 12:15 p.m. at sites A, B, & C)

Session 5 – Site A 8:00 a.m. – 8:30 a.m. 0.5 hrs. WW
Topic: **Aeration and Lagoon Enhancement Practices**
Speaker: **Jason Bradley, Bradley Innovation Group**
Description: Lagoons are an effective form of treatment, but they can have some issues that can hinder their overall performance of providing clean water. There are typically 6 common issues that lagoons will have that can keep them out of compliance. This session will discuss what those common problems are and how an operator can fix them. Even if a utility doesn't have lagoons, many of these tips can benefit plants that use settling basins, EQ Basins and more.

Session 6 – Site B 8:00 a.m. – 8:30 a.m. 0.5 hrs. DW
Topic: **Fire Hydrant Maintenance**
Speaker: **Cole Canady, Mueller Company**
This session will be a basic overview of hydrants, their maintenance and use. Topics covered will include how hydrants work, their functions in a distribution system, basic maintenance, and servicing. Also covered will be the how to properly install hydrants, the importance of thrust blocking, and the dangers of water hammer.

Session 7 – Site C 8:00 a.m. – 8:30 a.m. 0.5 hrs. DW/WW
Topic: **The Use of Drones (Unmanned Aerial Vehicles) for Inspections and Surveys**
Speaker: **David Siskin, Precision Products**
Description: Drones or Unmanned Aerial Vehicles (UAVs) are becoming very popular devices for recreation and logistics. Utilities can take advantage of these devices for various inspections and other tasks at a utility. This session will look at some of these tasks as well as the federal and local regulations of owning and operating an UAV.

Session 8 – Site A 8:45 a.m. – 9:15 a.m. 0.5 hrs. WW
Topic: **Sealing Manhole Chimneys**
Speaker: **Matt Terranova, A J Enterprises**
Description: Manholes are a major source of inflow and infiltration. The chimney section alone can be a major source of these problems. This session will demonstrate methods for sealing manhole chimneys for the purpose of preventing INI while holding up to the stresses encountered by manhole chimneys.

Session 9 – Site B 8:45 a.m. – 9:15 a.m. 0.5 hrs. DW
Topic: **Distribution Valve Maintenance**
Speaker: **Cole Canady, Mueller Company**
Description: This session will be a basic overview of valves, their maintenance and their use. Topics covered will include how valves work, their functions in a distribution system, basic maintenance and servicing. Also included will be how to properly install hydrants, the importance of thrust blocking, and the dangers of water hammer.

Session 10 – Site C 8:45 a.m. – 9:15 a.m. 0.5 hrs. DW/WW
Topic: **Workflow Based Asset Management for Water and Sewer Utilities (part 1)**
Speaker: **Ron Householder, CDP Engineers/MapSync**
Description: GIS tools and databases are becoming widely available and increasingly mobile friendly. Mobile technology has become gradually more affordable and most of us use it every day. These presentations explore how mobile technology combined with GIS can affordably benefit asset management efforts by improving efficiency and productivity.

Session 11 – Site A 9:30 a.m. – 10:00 a.m 0.5 hrs. DW/WW
Topic: **Water and Wastewater Analysis in the Field**
Speaker: **Lance Williams, Hach Company**
Description: This session will cover a variety of water and wastewater analyses that can be performed in the field. Topics will include the methods for running the analyses, how the analytical equipment operates, calibrations, and steps involved for completion of the analyses.

Session 12 – Site B 9:30 a.m. – 10:00 a.m. 0.5 hrs. DW
Topic: **The Process of Repairing Water Main Breaks**
Speaker: **Mike Rullo, Smith-Blair**
Description: This session will cover the many types and causes of main breaks and illustrate the instrumental process of effective repair. In addition to clamps, service saddles, and coupling systems, this session will explain special fabrication products and services which resolve complex problems often encountered in distribution systems.

Session 13 – Site C 9:30 a.m. – 10:00 a.m. 0.5 hrs. DW/WW
Topic: **Workflow Based Asset Management for Water and Sewer Utilities (part 2)**
Speaker: **Ron Householder, CDP Engineers/MapSync**
Description: This session is a continuation of Session 10.

Session 14 – Site A 10:15 a.m. – 10:45a.m. 0.5 hrs. WW
Topic: **The Collection System: Problems and Solutions**
Presenters: **Keith Bevins, Aulick Chemical Solutions**
Description: This session will cover the collection system from the customer's lateral to the headworks at the wastewater treatment plant. Topics will include the sources and controls of fats, oils, and greases, and collection system maintenance and inspection. Also covered will be odor control, where hydrogen sulfide problems come from, and methods of control.

Session 15 – Site B 10:15 a.m. – 10:45 a.m 0.5 hrs. DW
Topic: **Leak Detection with Correlators**
Speaker: **Tim Moore, 64 Seconds**
Description: This session will demonstrate use of a listening device and a water leak correlator. The use of an iPad based Asset & Maintenance Management system designed for documenting field activities in a real-time environment will also be discussed.

Session 16 – Site C 10:15 a.m. – 10:45 a.m. 0.5 hrs. DW/WW
Topic: **GPS for Water and Wastewater Utilities (part 1)**
Speaker: **Eric Muncy, Precision Products**
Description: Utilities often do their initial data collection and will call their GIS-Mapping/Asset Management Programs successful. However, utilities should take advantage of data collection tools such as Smart Phones/Tablets and High Accuracy GPS equipment to perform maintenance/updates. This session will look at technology that allows utilities to keep their GIS/Asset Management data up to date for use as a very powerful tool at their system. As a way to both demonstrate the technology and provide a hands-on learning environment, there will be a Geocache Hunt using a GPS handheld unit.

Session 17 – Site A 11:00 a.m. – 11:30 a.m. 0.5 hrs. WW
Topic: **Types of Wastewater Pumps Available in the Marketplace**
Speaker: **Jonathon Cummings, Wascon**
Description: As pump manufactures continue to flood the municipal marketplace, wastewater operators can be overwhelmed with the variety of pumps that are available. This presentation will give a brief overview of the major types of pumps they may encounter in the marketplace and how to select the right pump for their specific application.

Session 18 – Site B 11:00 a.m. – 11:30 a.m. 0.5 hrs. DW
Topic: **Leak Detection Methods (part 1)**
Speaker: **Jeff Merman, Automatic Controls Company**
Description: This session will focus on the use of leak detection equipment in the field. Attendees will be able to use leak detection equipment to locate simulated water leaks. Different devices will be compared and contrasted and their pros and cons discussed and demonstrated.

Session 19 – Site C 11:00 a.m. – 11:30 a.m. 0.5 hrs DW/WW
Topic: **GPS for Water and Wastewater Utilities (part 2)**
Speaker: **Eric Muncy, Precision Products**
Description: This session is a continuation of Session 16.

Session 20 – Site A 11:45 a.m. – 12:15p.m. 0.5 hrs. DW/WW
Topic: **The Use of Drones (Unmanned Aerial Vehicles) for Inspections and Surveys**
Speaker: **David Siskin, Precision Products**
Description: Drones or Unmanned Aerial Vehicles (UAVs) are becoming very popular devices for recreation and logistics. Utilities can take advantage of these devices for various inspections and tasks at a utility. This session will look at some of these tasks as well as the federal and local regulations of owning and operating an UAV.

Session 21 – Site B 11:45 a.m. – 12:15 p.m. 0.5 hrs. DW
Topic: **Leak Detection Methods (part 2)**
Speaker: **Jeff Merman, Automatic Controls Company**
Description: This session is a continuation Session 18.

Session 22 – Site C 11:45 a.m. – 12:15 p.m. 0.5 hrs. DW/WW
Topic: **Hydrovac and Valve Exercising**
Speaker: **Scott Lewis, Lewis Municipal Sales**
Description: This session will cover a combined hydrovac and valve exercising machine and how it can be used in water and wastewater utilities. Topics will include the uses of the hydrovac machine for cleaning out valve and meter vaults as well was for excavating in difficult situations such as near gas and fiber optic cables. In addition, a hydraulic valve exercising machine will be discussed and demonstrated.

LUNCH: 12:15 p.m. to 1:30 p.m.

Session 23 – Site D 1:30 p.m. – 2:30 p.m. 1.0 hr.. DW/WW
Topic: **Operator Responsibilities and Ethics**
Speaker: **Steve Capps, Kentucky Rural Water Association**
Description: Being an operator of a utility requires highly ethical behavior. Often times operators do not have someone looking over their shoulder watching their every move. This session will cover responsibilities and ethics with respect to properly conducting the duties of an operator and the possible consequences of failing to operate in an ethical manor.

Session 24 – Site D 2:40 pm – 3:40 pm 1.0 hr. DW/WW
Topic: **Asset Management**
Presenter: **George Haynes, Division of Compliance Assistance**
Description: Asset management is a crucial practice for water and wastewater utilities. This session will cover the basics for asset management and creating asset management plans. Included will be what information needs to be contained within the plan, the importance of the plan, and why it needs to be followed for the long term.

Session 25 – Site D 3:50 pm – 4:50 pm 1.0 hr. DW/WW
Topic: **Succession within Utilities - DCA's Viewpoint**
Presenter: **George Haynes, Division of Compliance Assistance**
Description: Utility staff can leave their positions for a variety of reasons. Whether leaving is planned ahead or very little notice is given, having other staff in place and trained to fulfill the duties of a vacant positon is important for maintaining day-to-day operations. This session will discuss proper policies for replacing vacant positions and ensuring viability of the utility in the future.

SPEAKER BIOS

Sessions 1, 2 & 11

Lance Williams joined Hach Company in 2016 as the Kentucky Regional Sales Manager. Lance holds an MBA from Midway University (2012)and a Civil Engineering degree from West Virginia University Institute of Technology (1990). Hach is a leader in the industry for laboratory instruments, process analyzers and water quality monitoring.

Sessions 3, 4, 18 & 21

Jeff Merman, President, Automatic Controls Co., has over 30 years of experience in Kentucky in the industrial instrumentation and controls business. Jeff holds an Associate's degree in Industrial Engineering from Northern Kentucky University.

Session 5

Jason Bradley of Bradley Innovation Group gained experience in water treatment at a young age in the aquaculture industry. In the mid 1980's his dad converted their traditional farm to an aquaculture operation. Not only did he learn about the mechanical filtration of water, but also about the biological process as well. Although his formal schooling was in business, he gained quite an education not only raising different species of aquatic animals such as tilapia, yellow perch, striped bass and saltwater shrimp, but he was also there for the development of the equipment that allowed them to raise these animals indoors. He played an integral part in gaining four US patents for the equipment used. This equipment was seen by some individuals from Purdue University's civil engineering department, and advised that this energy efficient equipment might be perfect for the wastewater treatment business. Jason's unique background in water treatment allows him to look at water quality issues in a completely different light. When dealing with a complete ecosystem that needs to thrive for clean water, all aspects need to be considered. Jason's expertise covers everything from hydraulic adjustments and micro-bubble aeration to using MBBR technology to remove ammonia in the water.

Sessions 6 & 9

Cole Canady has been with Mueller Company since 2015. His first job with Mueller was as a trainer, traveling the country in the Mueller Training Van to deliver training in cities across the continental U.S. In 2016 he moved to Kentucky and was given the Kentucky and West Virginia territories. Cole is a 2012 graduate of Sam Houston State University in Huntsville, Texas, with a Bachelor's Degree in Business Administration.

Session 7 & 20

David Siskin is the MGIS Support Specialist with Precision Products. He has been with the company since December of 2014. David graduated from the University of Arizona with a BA in Geography, and emphasized on Cartography and Regional Development courses while there. He is a Trimble Certified Trainer on Terrasync Field Software and GPS Pathfinder Office Software. David is excited to see the GIS/GPS field grow with the influx of mobile devices capable of collecting data in the field via mobile apps as well as the growth in UAV technology.

Session 8

Matt Terranova has been with A J Enterprises since 2000 and has over 25 years' experience in the water and sewer industry. Matt has a B.S. in Mechanical Engineering from the University of Louisville (1986). Over the last few years Mr. Terranova has focused on different processes for relining manholes and sealing the chimney area to reduce or eliminate inflow and infiltration.

Sessions 10 & 13

Ron Householder, PLS, has held management positions for MapSync, Co. since June 1, 1994. Prior to this he was the owner of In-House Solutions, a mapping and consulting firm based in Lexington, Kentucky. He is a registered land surveyor with over twenty-nine years of experience in the land surveying, mapping and civil engineering fields. Mr. Householder has experience in Global Positioning Systems (GPS), Geographic Information Systems (GIS), and mapping application software development. He currently serves as Past-President of the Board of Directors of the Indiana, Kentucky and Ohio-Geospatial Information Technology Association (IKO/GITA).

Session 12

Mike Rullo has been employed as the Territory Manager for Smith-Blair since February, 2011. Mike provides technical presentations, workshops, and education training throughout the Midwest, including Indiana, Kentucky, Michigan and Ohio. Mike began his waterworks career in 1982 as a Sales Representative for Victory White Metal Waterworks Division in Cleveland, Ohio. Other work experience includes American Flow Control Company (1990-1998) and Julian Supply Company (1998-2011).

Session 14

Keith Bevins started work with Aulick Chemical Solutions in 2013, as a sales representative. Prior work experience includes working for Kentucky Rural Water Association as a Wastewater Technician from July 1999 to 2013, as the Wastewater Facilities Manager for Pike County, and Chief Operator of Utilities for Wheelwright.

Session 15

Tim Moore with 64 Seconds has been involved in the potable water industry for the last seventeen years with a focus on the development and implementation of new technologies in Water Leak Detection and Maintenance Management. Previous experience includes a background in the wastewater field with a primary focus on the design, implementation and support of Open Channel Flow Metering products.

Sessions 16 & 19

Eric Muncy is the Mapping-GIS Sales Consultant for **Precision Products**, the authorized dealer for Mapping and Survey Trimble GPS Products for Kentucky. Eric has been in the GPS and GIS fields for over 18 years, working on a variety of GIS projects including FEMA Flood Studies, National Guard Environmental Impact Studies, and Stormwater Planning Projects in Oklahoma, Tennessee, North Carolina, and Kentucky. Eric graduated from the University of Louisville in 1994 with a BS degree in Geography with a concentration in Environmental Analysis with a focus in his Senior year in GIS/Computer Mapping. Today, as the sales consultant for Mapping and GIS products, he helps educate customers about what particular GPS products might be the best fit for their needs. He also helps train and support customers throughout the Kentucky and southern Indiana area.

Session 17

Jonathan Cummings has worked for WASCON since 2004 where he started in Service and worked his way into sales. His first experience at Wascon was rebuilding grinder pumps in the shop. From there he moved to doing service calls and service jobs. WASCON does service and sales on all equipment in the water & wastewater industry. Jonathan now maintains inside sales covering all quotes that are required on jobs in both municipal fields. Along with inside sales Jonathan also does classes on troubleshooting and repair of sewer pumps.

Session 22

Scott Lewis joined Lewis Municipal Sales in 2014, after twelve years in the IT field. With the growing prevalence of computerized control systems in the waterworks industry, Scott brings his in-depth knowledge of computer technology to the firm to assist customers in understanding the increasingly sophisticated capabilities of tools and equipment the firm offers. His current focus is on training customers in the use of line locating and leak detection products, and also assists customers in their purchase decisions involving valve exercising equipment; all three of which now incorporate sophisticated electronic controls.

Session 23

Steve Capps came to Kentucky Rural Water Association in 1994 from the City of Burkesville, Kentucky, where he had served as Director of Public Works for twelve (12) years. He also had experience as the Water Treatment Plant Operator and also the Wastewater Treatment Plant Operator for six (6) years. He is currently certified in water treatment, wastewater treatment and holds a certificate as a water distribution system operator. Mr. Capps served as the Wastewater Technician for the Kentucky Rural Water Association from June 1994 to June 1999. His primary duties as Wastewater Technician were to provide technical assistance and hands-on training to rural wastewater utility personnel throughout Kentucky. Mr. Capps' position with the Kentucky Rural Water Association from June 1999 to the present is that of Wastewater Trainer/Technician and Compliance. In that capacity he provides on-site technical assistance and training to small rural municipal wastewater treatment systems and rural systems in unincorporated areas.

Sessions 24 & 25

George Haynes serves as an Instructor for the Certification and Licensing section of the Division of Compliance Assistance.

Mail to:	Commonwealth of Kentucky Department for Environmental Protection	*For Official Use Only* *Do not write in this space*
Division of Compliance Assistance Certification and Licensing Branch Operator Certification Program 300 Fair Oaks Lane Frankfort, KY 40601	**Application for Approval of Courses for Continuing Education Credit** *Drinking Water Treatment, Drinking Water Distribution, Bottled Water, Wastewater Treatment and Collection System* Telephone: 1-800-926-8111 www.dca.ky.gov/certification	COPY

I. Course Sponsor Information: **Agency Interest Number:** 108571

A. Sponsoring Organization (school, business, association, etc.):

Kentucky Rural Water Association

Key Contact Person:

Name and Title: **Janet Cole, Education Coordinator**

Address: **3251 Spring Hollow Avenue**

City, State and Zip: **Bowling Green, KY 42104**

Phone and Fax: **Ph: 270.843.2291** **Fx: 270.796.8623**

E-mail: **j.cole@krwa.org**

Web Page: **www.krwa.org**

☒ One-Time Approval Requested ☐ Two-Year Approval Requested

B. If individual requesting approval is different than the key contact person for the sponsor, please complete the following information:

Name and Title: _____

Address: _____

City, State and Zip: _____

Phone and Fax: _____

E-mail: _____

II. General Course Information:

A. Title: **2017 Operator EXPO**

B. Location and Date/s: **Hardin Co. Fairgrounds, Glendale, KY** **May 23-24, 2017**

C. Cost per Student or Group: $ **50.00**

D. Delivery Format or Media (check those that apply):

☒ Classroom ☐ Web/Online ☐ Laboratory ☐ Exhibition

☐ Field ☐ CD-ROM ☐ Video/Audio ☐ Correspondence

☐ Other (Explain)

Kentucky UNBRIDLED SPIRIT

E. Continuing Education Credits **(hours)** Requested for Target Audience:

Drinking Water Treatment, Distribution and/or Bottled Water: **14 hrs. (maximum 10)**

Wastewater Treatment and/or Collection: **13 hrs. (maximum 10)**

(Attach a detailed description explaining how this training relates to the wastewater treatment process.)

III. Required Items (must be attached to submittal, check off as completed):

A. ☒ Course Learning Objectives
B. ☒ Criteria for Successful Completion by Operators
C. ☒ Agenda (timed with instructors identified and brief description of topics)
D. ☒ Credentials for All Instructors

IV. Additional Attachments (required for distance learning courses, optional for other training):

A. ☐ Instructional Design (developed by whom/their credentials)
B. ☐ Curriculum Content (subject matter experts/their credentials)
C. ☐ Required Assignments and/or Examinations (type, passing score, etc.)
D. ☐ Mandatory Time Constraints (deadlines, granting of extensions, etc.)

V. Signature of Sponsor's Contact Person

I confirm that all information provided with this application is accurate to the best of my knowledge. A complete list of attendees and credits to be awarded to them will be forwarded on a "Continuing Education Activity Report" to the Kentucky Division of Compliance Assistance (within 30 days of completing the course when possible).

Printed Name and Title: **Janet Cole, Education Coordinator**

Signature and Date: Janet Cole **March 28, 2017**