Message from the Chair

By David Goodrum
KWWOA State Chairman

I write this message to all members of KWWOA to thank them for the opportunity to serve as Chairman of the State KWWOA Board. I hope that everyone had a blessed and happy holiday season and wish for you a prosperous and healthy New Year. I hope to see all of you at the 60th Annual KWWOA Conference at the Crowne Plaza in Louisville, April 9—13, 2017 (registration materials enclosed). We have some great training and socializing planned for all.

I would like to share with you a report released by the U.S. Environmental Protection Agency, but space will not allow it. I will share with you the title and the report number below and I suggest you read it determine the implications for your system. The primary intent of the report is to advise that there are concerns about water quality within the small systems throughout the country and EPA’s intent to ensure that drinking water regulations are being enforced on all systems equally, no mater the size.

Office of the Inspector General
Enforcement & Compliance
Drinking Water: EPA Needs to Take Additional Steps to Ensure Small Community Water Systems Designated as Serious Violators Achieve Compliance
Report No. 16-P-0108 March 22, 2016

With a more serious effort being made to get all municipal water systems to produce the best and safest water possible, some small systems need help. Budget constraints, staffing problems and improperly trained operators, have become a problem for some systems around the state. I ask that all KWWOA members remember our Mission Station below and think about where you can lend a hand:

“To enhance Kentucky’s Water Environment through training, education, certification and the exchange of operational and technical information with experienced water quality specialists.”

Check with surrounding systems to see if you have a neighbor that could use some help. Be particularly mindful of systems that are in need of experienced operators and/or are short handed. If you know a retired operator that that may bored of the slow life or his “Honey-do list” is to short or long, who

Continued on page 2
Article Continued from Page 1

would be willing to lend a hand for the health and welfare of the Commonwealth, give them the heads up on where they might be of assistance. If you don’t know of a particular system that needs help, they can also contact the Division of Water’s Regional Office for the area. We have a wealth of information and experience within the operator community, pass it on!

I would also challenge all members to step up for your Association. Get involved, don’t be a wall-flower, join the dance, I promise you won’t be sorry! Chapter offices are a great place to start!

Lastly, I would like to thank all the current and past board members for their hard work and loyalty to an organization that I love. A special thanks to Robin Strader, my KWWOA State Vice-Chair and our Member Services Director who endure most of the workload. Robin and Lisa are special people and I appreciate their work more than words can say.

Saying good bye from the Chair,

David Goodrum
KWWOA Chairman

Fearless Leader Wanted!
(Or at Least One that Can keep up with Robin Strader)

The Kentucky Water and Wastewater Operators Association (KWWOA) is seeking nominations for the position of State Board Vice-Chairman. Please share this information and encourage individuals within your Utility/Company, as we know there are many capable KWWOA members whose knowledge and experience would benefit the Association and operator community.

The position of Vice-Chairman is a four-year commitment to the Association. The first two years are served as the Vice-Chairman followed by two years as Chairman. The responsibilities of the Vice-Chair are to preside over meetings of the KWWOA Board of Directors in the absence of the Chairman and act as the Chair of the State Awards Committee. A full description of duties associated with this position, as well as all Association procedures, may be found on the KWWOA website (www.kwwoa.org) under the “About Us” section, within “Procedures”.

Nominations, including a short, informal resume, will be accepted until January 16, 2017. Please forward this information to info@kwwoa.org. Ballots for this position will be distributed in March to 2016 KWWOA Members for voting and the winner will take office at the 60th Annual KWWOA Conference to be held April 9-13, 2017. Questions regarding this position, may be directed to Roy Gray at manchesterwtp@yahoo.com or by calling 606-596-0296 or Lisa Detherage at Lisa@kwwoa.org or 502-352-0510.

Return to Sender

Before renewing your 2017 KWWOA Membership, please check the accuracy of your account information. We are having a lot of mail and emails returned due to invalid addresses. Incorrect contact information prevents us from sharing information to which you are entitled nor contact you if we have questions regarding an order you have placed or to advise of a class change. For privacy reasons, KWWOA does not sell our members’ account information.

To make changes to your KWWOA account, log in using your email and password. Once logged into you account, you will see several “tabs” at the top of the page, two of which are labelled “Edit” or “RedHen Contact”. To change your password, select the “Edit” tab. Here you will find two boxes where you can enter and confirm a new password.

The “RedHen Contact” tab (don’t ask me why it is named that!) is where your personal information is listed: Agency Interest Number, home address, employer’s address, how you want to receive KWWOA information, etc. This information may be updated any time. If you became a member of KWWOA before becoming certified, replace your “KWW” number with your Agency Interest number, as this is our indicator to submit your training hours to the KY Division of Compliance Assistance. Any time you make informational changes to your account, make sure and hit the “Save” button at the bottom of each page.

If you need help accessing or making account changes, contact Lisa Detherage, at Lisa@kwwoa.org or by calling 502-352-0510.
Pollutants can enter the air any time water comes into contact with it during a treatment process, including during evaporation, aeration, and agitation. Chlorination also has the potential to release pollutants into the air. Even common equipment release air pollutants, like generators, boilers, or heaters.

Air pollutants include things like smoke, dust, soot, particulates, acids, fumes, gases, odors, and vapors. The Kentucky Division for Air Quality (DAQ) and U. S. Environmental Protection Agency (EPA) have regulations in place to lessen harmful impacts of pollutants that are released into the air.

A DAQ permit or registration may be required to construct and operate a source of air pollutants. The type of permission depends on the amount of air pollutants that could be released if it did operate all processes and equipment 24 hours a day, 7 days a week at full capacity. More information on the different air permitting levels can be found in Typical Permits at a Glance, available at DCA.KY.gov in the Quick Links.

To find out if your plant needs an air quality permit, you have to calculate the potential air emissions from each piece of equipment and process. The Air Quality Potential-to-Emit Compliance Guide, available at DCA.KY.gov under Quick Links, explains how to complete these calculations and put together an air quality application. In addition to DAQ requirements, there may be federal regulations that require submission of at least an air quality registration. Federal regulations may apply to any plant based on equipment and processes, such as the use of reciprocating internal combustion engines (RICE).

RICE can be found in things like dryers, fire pumps, irrigation pumps, and air compressors. Many wastewater treatment and drinking water plants have a “back-up” engine or generator that is used in case of emergencies to keep the plant running if the power goes out. Even these emergency engines may have requirements under RICE rule if they are non-mobile, or do not move during a 12-month time period.

In order to figure out if and which regulation might apply to an engine, you will need to know the following:

- What kind of fuel does the engine use?
- What is the horsepower of the engine?
- Is the engine a two-stroke or four-stroke? If gas-fired, is it rich burn or lean burn?
- What date was the engine made or reconstructed?
- How is the engine used – in the wastewater treatment process, emergency use only, peak shaving, etc.?
- Is the treatment plant a major or minor source of air pollutants?

With these questions answered, you can use the EPA’s Regulation Navigation Tool to help find the federal regulation & requirements that may apply to your engine. The tool & additional information can be found at www.epa.gov/ttn/atw/icengines/comply.html.

The last question above may give you pause if you are unfamiliar with air quality. Calculating air pollutant releases will help to identify whether the plant is a major or minor source. The terms minor or major source are related to the amount of potential air emissions you could release and the type of permission your plant requires.

If you have any equipment or processes subject to a federal regulation, no matter how little air pollutants are released, you must apply for, at minimum, an air quality registration. DAQ reviews applications for completeness, determines the applicable state and federal regulations, and then issues permits or authorizations accordingly.

The Division of Compliance Assistance (DCA) can help with the air permitting process, including helping you find which regulations apply to your plant. Please contact DCA at 502-564-0323 or envhelp@ky.gov for assistance.
Searching for a better way to run your treatment facility?

American Development Corporation offers a full line of water and wastewater treatment chemicals. We start with jar testing to find the right combination of chemicals for your facility. We then design a mini-bulk system complete with storage tanks and chemical feed pumps specifically for your facility’s production requirements. After installation, you can count on our 24/7 service and support. ADC offers a full line of treatment chemicals to assist you with coagulation, flocculation, pH adjustment, disinfection, fluoridation and corrosion control.

Your search is over ...

Delivering much more than chemicals

1.888.542.8661 • adc-chem.com • 821 William D. Jones Drive • P.O. Box 620 • Fayetteville, TN 37334
Introducing the Kentucky Division of Compliance Assistance
By Mary Jo Harrod, KY Division of Compliance Assistance

Kentuckians will want to take advantage of the services offered by the Kentucky Division of Compliance Assistance (DCA) and its programs. Located in the Department for Environmental Protection, DCA provides services to increase environmental knowledge and leadership. DCA offers programs to assist businesses and citizens of the Commonwealth with certifying professionals who are responsible for providing safe drinking water, proper treatment of wastewater and disposal of solid waste; regulatory compliance; environmental leadership and brownfield redevelopment.

The Operator Certification Program in the Certification and Licensing Branch of DCA educates and certifies drinking water, wastewater and solid waste operators in the Commonwealth. Through this program, operators receive the training and certification they need to serve their communities responsibly and safely in critical environmental areas. Though the program does not administer facility requirements, it is responsible for the testing and training records of certified operators. The Operator Certification Program presents classes for bottled water, collection, distribution, treatment, landfarm, landfill and composting operators.

The program blog, Operation Matters, provides relevant information to certified operators and interested individuals to ensure they have up-to-date information to perform their duties.

With operator retirements and the continuing need for knowledgeable operators, recruitment activities are advocated by the program. Staff members encourage individuals to consider pursuing careers as operators in drinking water, wastewater and solid waste facilities. Well-designed and properly maintained facilities are important to ensure a community receives the highest quality of drinking water, wastewater disposal and solid waste handling. Without the training and knowledge that the operators bring to their job, even state-of-the-art facilities cannot deliver what is needed. Certified, dedicated operators are vital to ensuring a community's health.

Other programs in DCA include the Environmental Compliance Assistance Program (ECAP), which is ready to help a business understand its environmental obligations and how to meet them. Need permits? Staff members can help you navigate through the permit application process.

KY EXCEL is the state’s free environmental leadership program. Anyone—individuals, businesses, schools and organizations—in Kentucky can join. Members are not only doing projects of their choosing that protect the environment, but they are noticing substantial monetary savings. Call if you want suggestions of ways to go green.

The Kentucky Brownfield Redevelopment Program offers a variety of services to assist communities, nonprofits and prospective purchasers in turning problem properties into economic and community development opportunities.

The division also offers workshops on a variety of topics. For a list of upcoming events or more information, check out DCA’s Facebook page, visit the DCA website at http://dca.ky.gov/, call 502-564-0323 or e-mail envhelp@ky.gov. Get to know our programs. We are here to help you!
60th Annual KWWOA Conference

Elements of Success

April 9 - 13, 2017, Crowne Plaza, Louisville, KY
WHO SHOULD ATTEND THE 60th ANNUAL KWWOA CONFERENCE?

- Drinking Water and Wastewater (Municipal and Industrial) System Operators requiring up-to-date information for system operations and/or continuing education training hours for license renewal. The Conference will offer 70+ sessions that will convey innovative tools, explore successful operational techniques, provide regulatory updates and share emerging solutions for system operations.

- Lab Analyst and Engineers who must obtain continuing education,

- Operators who wish to test with the KY Division of Compliance Assistance (DCA) for a Wastewater or Surface Water Treatment operator certification.

Continuing education attendees may earn up to 18 hours by attending each six-hour day of classes. All technical presentations will be submitted for approval to the certifying authorities in Kentucky, Indiana and Ohio and the Division of Water’s Lab Certification Program. Once approved by the certifying authorities, notice will be posted on the KWWOA website.

HOW DO I REGISTER TO ATTEND THE CONFERENCE?

Operators who plan to attend for continuing education purposes may complete the registration form on page 9 or online at www.kwwoa.org. One check may be submitted for multiple registrations. If registering online, you have the option of paying by check, credit or debit card through PayPal for multiple registrants. You do not have to have a PayPal account to utilize this method of payment. No refunds will be granted for registrations cancelled after March 9, 2017.

Operators who wish to attend the Collection or Surface Water Treatment certification review/testing sponsored by the Division of Compliance Assistance, must follow the registration procedures outlined on the DCA website (dca.ky.gov/certification). Certification applications and registration forms are also available by contacting the Certification and Licensing Branch at (502) 564-0323. Applicants must apply and be approved in advance for testing and will be notified in writing by the Certification and Licensing Branch of their acceptance into the review/exam session.

Approved Certification attendees are automatically registered for the Conference and granted a partial registration which entitles them to attend all Conference events with the exception of the Monday breakfast. If you wish to attend the Monday breakfast, you may pay for this event ($30.00) onsite at the Conference Registration Desk.

WHAT IS INCLUDED IN THE CONFERENCE REGISTRATION FEE?

- Six hours of continuing education training each day, for a total of 18 hours
- Access to 90+ vendors within the Exhibit Hall
- Conference Social Events
- Ability to network with speakers, exhibitors & peers.

- 2 Meals (Monday breakfast & Tuesday lunch)
- Submittal of training hours earned to the appropriate regulatory authority.
- If not a member, a 2017 KWWOA Membership, providing access to KWWOA training events throughout the year, most of which are free.

CONFERENCE HEADQUARTERS AND LODGING RESERVATIONS

Crowne Plaza
830 Phillips Lane
Louisville, Kentucky
$125.00 for all standard rooms sizes
(Check In—3:00 PM, Check Out—11:00 AM)

A block of rooms is being held through March 21, 2017, so make your reservation early to ensure availability and access to the quoted rate. Reservations can be made by visiting the KWWOA website at www.kwwoa.org, clicking on the “State Conference Information” tab and selecting the “Crowne Plaza Room Reservations” link or by calling 1-888-233-9527 (reference the KWWOA Conference to receive the rate quoted). Parking is free and internet access is included within the sleeping rooms at the rate quoted.
Tentative Conference Agenda  
(Final Times May Vary Slightly)

Sunday, April 9, 2017

4:00 PM — 6:00 PM  Registration Open

Monday, April 10, 2017

6:30 AM — 5:45 PM  Registration Open
7:00 — 8:30 AM  Breakfast, Opening Session, KWWOA Meeting & Awards Ceremony
8:50 — 9:50 AM  Keynote Address/Technical Session 1
9:00 AM — 12:00PM  Vendor Set-up
9:55 AM — 12:00 PM  Technical Sessions 2 & 3
12:00 — 1:30 PM  Lunch On Your Own
1:00 PM — 5:45 PM  Exhibit Hall Open—Crowne Ballroom
1:30—2:30 PM  Technical Session 4
2:30 PM - 3:30 PM  Ice Cream Social-Exhibit Hall—Crowne Ballroom
3:30 PM — 5:35 PM  Technical Sessions 5 & 6
8:00 PM  Bowling Tournament at Executive Strike & Spare  
(Across from the Crown Plaza)

Tuesday, April 11, 2017

7:00 AM — 4:30 PM  Registration Open
8:00 AM — 2:00 PM  Exhibit Hall Open—Crowne Ballroom
8:00 AM — 12:15 PM  Technical Sessions 1–4
12:15 — 2:00 PM  Lunch in the Exhibit Hall
2:00 — 4:05 PM  Technical Sessions 5 & 6

Wednesday, April 12, 2017

8:00 AM — 4:30 PM  Registration Open
8:00—9:00 AM  Coffee Available—Across from the Registration Desk
8:30 AM — 11:40 PM  Technical Sessions 1—3
11:40 AM — 1:00 PM  Lunch on Your Own
1:00 PM — 4:10 PM  Technical Sessions 4—6

Thursday, April 13, 2017

8:00 AM  Certification Testing— Wastewater and Surface Water Treatment
CONINUING EDUCATION
REGISTRATION FORM
Crowne Plaza, Louisville, Kentucky
April 9—13, 2017
(Please Print Clearly)

Name: ____________________________________________________ AI No. or KWWOA ID No.: __________________________

Home Address: __________________________________________________________________________________________

City:______________________________________________________ State: __________  Zip Code: ______________________

Employer: ________________________________________________________________________________________________

Work Address: ____________________________________________________________________________________________

City:______________________________________________________ State: __________  Zip Code: ______________________

Title: ___________________________________________ Work Phone: _______________________________________

County: ___________________________________________ Email Address (Home or Business): ________________

Are You A 2017 Member?_____Yes _____No       Prefer to receive KWWOA information at: ____Home _____Work

IMPORTANT NOTE: THIS FORM MUST BE COMPLETED IN ITS ENTIRETY

Registration includes: Technical Sessions, Exhibit Hall admittance, Monday breakfast, Tuesday Lunch and all Social
Events.

Pre-Registration
(Postmarked by February 28, 2017)

☐ $175—2017 KWWOA Member

☐ $215—Non-Member Registration
(Includes a 2017 KWWOA Membership)

☐ $10—2017 KLA Membership

Registration
(March 1, 2017 or after postmark)

☐ $225—2017 KWWOA Member

☐ $265—Non-Member Registration
(Includes a 2017 KWWOA Membership)

☐ $10—2017 KLA Membership

TOTAL REGISTRATION FEE INCLUDED (One check may be submitted for multiple registration forms): $____________

Name of Payee if different from the Registrant above: _______________________________________________________

Submit the Registration Form(s) and the appropriate payment, made out to KWWOA, to the following address:

KWWOA, P. O. Box 700, Lawrenceburg, KY 40342

No Refunds issued after March 9, 2017.

Anyone registering online will receive an email confirmation. Those registering via regular mail will not receive a
confirmation, but may log into their KWWOA account to confirm receipt of the order.

FOR INFORMATION, contact Lisa Detherage at (502) 352-0510 or via email at Lisa@kwwoa.org

*Do not submit this application if applying to attend the Division of Compliance Assistance, Operator Certification Review & Exam.
BRINGING IT ALL TOGETHER

Innovative technologies mean we can offer you the highest total efficiency yet in a wastewater pump — the Grundfos SL range.

WASCON now proudly represents all Grundfos Wastewater Products in the Commonwealth of Kentucky. Ask your WASCON representative about the 90 Day Try and Buy Program! WASCON — 901 East Main Street, Livingston, TN 38570 — 931.823.1388

- **S-tube**
  The S-tube impeller offers world class hydraulic efficiency without compromising free passage.

- **iSOLUTIONS**
  Intelligent technology adapts with precision to deliver optimal performance, energy efficiency, and reliability.

- **Blueflux®**
  Premium energy efficient motor technology that reduces service and life-cycle costs.

- **SMARTDESIGN**
  Functionality that makes installation, operation and maintenance easier and more user-friendly.

be think innovate

www.grundfos.us
www.wasconinc.com
Energy & Environment Cabinet Updates

Where Did They All Go?
By John A. Mura, Energy & Environment Cabinet

About 1,500 state employees have a brand new workspace in an energy efficient structure thanks to a public-private-partnership that enabled the five-story, 371,000-square-foot 300 Building to be constructed on Sower Boulevard in Frankfort.

Energy and Environment Cabinet (EEC) employees moved into the building beginning in June, followed by Education and Workforce Development Cabinet employees in August and the Kentucky Department of Education in September. For the EEC employees, it was the first time the department could bring almost all of its employees into one space. Employees relocated from the Fair Oaks building owned by Buffalo Trace, the Capital Plaza Tower and offices at Hudson Hollow.

Construction on the building began in March of last year shortly after the Finance and Administration Cabinet signed a design-build-finance-operation agreement with CRM/DW Wilburn LLC of Lexington. The building is part of a public-private-partnership, where the company constructing the building will finance the costs and the state will make lease-purchase payments over 35 years.

Andy Casebier, director of the division of engineering and contract administration in the state Finance and Administration Cabinet, said the building cost between $70 million and $80 million to build.

The building is LEED Certified, meaning it is designed for a 19 to 26 percent reduction in utility expenditures compared to existing offices. A large number of energy efficiency and sustainability items are features of the building, including abundant natural day lighting, LED fixtures, high-efficiency mechanical equipment and low-flow plumbing. All but a handful of employees who work in the building have outside views.

Other energy-efficient features include: the front drive that features pervious pavement, which reduces runoff, dark-colored carpet throughout the building made of recycled material, the terrazzo flooring in the lobby made of recycled material, the large glass windows that filter 92 percent of UV rays and greatly reduce the reliance on artificial light, workstations that share circuitry and lessen the amount of electricity wasted.

Each floor has private offices and “neighborhood areas” with common spaces with tables for group collaboration projects.

The building sits atop one of the bluffs off the East-West Connector, offering views from the back of the top floor that include a water tower in Lawrenceburg, about 14 miles away, and from the front, a view of Kentucky State University and the Cabinet for Health and Family Services.

Have ECC’s Phone Number’s Changed?

With the move of the Energy and Environment Cabinet employees into the Sower Boulevard building in Frankfort, they also received a new phone system that provides each employee with their own direct dial phone number. If you need to reach a particular individual, the Cabinet has established an online list that allows you to look up the individual by last name. Simply select the following link, enter the name of the individual and their new phone number will be provided, as well as their email address: http://eec.ky.gov/Pages/Phone-Directory.aspx

New Address, New Phone Numbers & New People!

The Division of Water has welcomed Joseph Uliasz, as the new supervisor for the Drinking Water Compliance and Technical Assistance Section. Mr. Uliasz studied electrical engineering and environmental science which lead to a career in drinking water operations. Mr. Uliasz became a certified drinking water operator in Florida, and after his family relocated to Kentucky he received his certifications for Class IVA water treatment operation as well as Class IIID water distribution. He served as a water plant operator at Georgetown Municipal Water and then took a position as the manager for the Beech Fork Water Commission in Clay City, Kentucky.

Subsequent to his employment as a water plant operator, he worked for and owned companies that sold, installed and trained operators on equipment used for the treatment of both drinking water and wastewater. In all of these positions, Mr. Uliasz gained a great deal of experience in plant operations, chemical treatment, water distribution, employee/operator training and customer service. Mr. Uliasz is a U.S. Army veteran and his military service, education and professional experience provide valuable experience in the supervision of personnel. This experience coupled with his knowledge of drinking water treatment and distribution expertise will prove to be invaluable to the Compliance and Technical Assistance Branch.
While cars, TVs and toasters are rated in Consumer Reports to provide consumers with comparison data on quality, cost of repairs, reliability and more, pipeline inspection equipment buyers must look for other methods to make good buying decisions.

These ten tips provide a common sense approach that will keep the playing field level, ensure you end up with only what you need and provide a clear understanding of the true cost of ownership.

1. Determine what you need now and into the future. This will help you understand whether a contractor, rental, or purchase is the best inspection solution.

2. Choose pipeline equipment that fits your pipeline system. This includes pipe diameter, pipe material, and general condition. While equipment is designed for specific diameter pipes, if your pipelines are in bad shape, you’ll want to place durability high on your list of considerations. Identifying the brand that contractors prefer is helpful because they tend to know what holds up under heavy use and adverse conditions.

3. Consider who is responsible for laterals: your organization or homeowners. Because laterals are a well-recognized source of inflow and infiltration, you may want to choose a manufacture that can provide quality lateral inspection tools along with mainline equipment.

4. Understand equipment features and, more importantly, their proven benefits. Why this might sound obvious, some companies, for example, offer a “rollover warning” for CCTV tractors. While this sounds good, you must understand whether rollovers are common and/or hard to detect. The answers in this example are “no” and “no.” So, if you specify this feature in your request for quotes, you needlessly miss considering all the manufactures that might meet your needs with competitive pricing.

5. Spend time determining how manufactures provide service. This factor is as important as any other consideration because pipelines are very hostile environments and you will need service. There are several ways to get the answer to this critical question: Ask the manufacturer if you needed to have your equipment repaired today, what the process is to obtain service and how fast will you be back up and running. See if a loaner and/or rental programs are available. Ask for a list of typical repairs and their associated costs. This is very important, as it will help you understand the true cost of ownership. Low bid or acquisition prices with very high repair costs are unfortunately common. Be sure to ask how long it takes to get parts, too.

6. Choose software that runs on multiple manufacturers’ equipment. With plenty of good software choices, it is hard to justify getting committed to using a vendor’s propriety software.

7. Get recommendations. There is nothing like a qualified and unbiased opinion. Your neighboring municipalities will take your call and offer some help.

8. Plan for demonstrations. Make a checklist and rate a system’s ease of use, set-up time, flexibility, level of training required, safety considerations, and tech support in the field.

9. Find out where training takes place, the cost, who performs it, and how it will be available for future employees.

10. Check the warranty carefully. The length, scope and transparency of a warranty will tell you a lot about how confident the manufacture is in both the quality of its equipment and willingness to satisfy customers. If it sounds like a gimmick, it most likely is a gimmick.
HIGH PERFORMANCE AND AFFORDABLE PIPELINE INSPECTION SYSTEMS . . .

And Great Support From Our New Kentucky Service And Training Center!

Today’s municipalities need high performance CCTV pipeline inspection solutions that fit challenging rehabilitation budgets. For over 30 years RST has designed easy-to-use cameras, transporters, and vehicles that are proven to deliver high quality inspections and low cost of ownership. Here’s why:

1. Durability. Our equipment is built to last. It’s why RST’s tools feature backward and forward compatibility.

2. Single Conductor Technology. RST’s coax cable provides superior functionality, great video quality, and power. Wrapped in steel, it’s nearly indestructible and has an industry-leading 5-Year Warranty!

3. Service. Pipelines are hostile environments. Reliable tech support is a phone call away and our new full-service facility in Mt. Sterling, Kentucky, will keep your equipment up and running. We even have a loaner program!

4. Low Total Cost. Compare our purchase prices and cost of ownership with competitors. It’s why demanding municipalities and contractors choose RST.

Watch Our Video at www.rstechserv.com
Call Us at 866.769.8264 For A Demo

RS Technical Services Inc.
High Performance Pipeline Inspection Systems

THE SINGLE SOLUTION
Beer is a product that everybody likes to talk about. The explosion of microbreweries around the United States gave Clean Water Services (Portland, Ore.) an idea for a program to start conversations about the reusable nature of all water. The utility began partnering with Oregon home brewers in 2014 to brew beer from reclaimed water to demonstrate that water should be judged by its quality, not its history.

**Sustainable Beer Smackdown**

The utility produced a batch of high-purity water that far exceeds safe drinking water standards and provided it to local home brewers. The beers, using the Pure Water Brew brand, were featured at WEFTEC 2014 and WEFTEC 2015 as part of the Sustainable Beer Smackdown. Each successive year, the Smackdown has gained new contenders. In September 2016, at the WEFTEC 2016 Innovation Pavilion, Hillsborough County in Florida introduced its New Water Brew, joining Clean Water Services and the Activated Sludge beers from the Milwaukee Metropolitan Sewerage District and The Water Council (Milwaukee, Wis.). In addition, CDM Smith (Boston), in partnership with the Water Replenishment District of Southern California, served up an Indian pale ale called the FAT Californian, named after the full advanced treatment (FAT) model of treatment for potable reuse applications.

This year, the Reuse Beer Smackdown dovetailed nicely with the release of the WEF Water Reuse Roadmap, a collaborative effort by WateReuse (Alexandria, Va.), Water Environment & Reuse Foundation (WE&RF; Alexandria, Va.), and the National Water Research Institute (NWRI; Fountain Valley, Calif.). Such efforts serve to engage industry professionals, public leaders, and imbibers everywhere in this conversation about clean water, not only for its role in health, but also in supporting big and small businesses.

**The Importance of Legitimacy in Reuse**

While the beer events are fun and engaging, the most important aspect of these efforts is the focus on creating an authentic conversation with the larger community about water quality. These conversations are the cornerstones of a sociological concept known as “legitimacy.”

Legitimacy is more important as communities consider reuse projects, particularly potable water reuse. Reuse projects have often been met with public opposition, despite having proven that the technology and water quality meet or exceed drinking water standards. Oftentimes, technical professionals such as engineers and scientists believe the public will accept new technologies when it is provided with information through marketing and public education. Such outreach efforts need be authentic to achieve public support.

Three levels of legitimacy need to be addressed to have a successful project.

- The Pragmatic level focuses on the user’s self-interest, seeking to answer questions such as “How do I benefit personally?” and “How am I involved in the decision-making process?”
- The Moral level deals with social values and welfare, addressing questions like “How is quality and process safety guaranteed?” and “Is the organization trustworthy?”
- The final level, Cognitive, deals with customs and routines that are taken for granted. “Does the technology fit with my daily life?” and “Is the technology essential, with no feasible alternatives?” are examples of the inquiries that community members need answered.

**Three Levels of Legitimacy**

- **Pragmatic** – the user’s self-interest
- **Moral** – social values and welfare
- **Cognitive** – customs and taken-for-granted routines

**Orange County and Nevada strive for legitimacy**

One example of how legitimacy can produce successful results is the Orange County Groundwater Replenishment System in California. Through its dedication to the outreach efforts, utility managers were recognized as trustworthy and competent experts in the community.
Taking the lessons that Orange County learned to heart, a northern Nevada utility values legitimacy as part of a feasibility study that may someday lead to Nevada’s first potable reuse project. From the home lateral to the final compliance testing, ensuring the public should have the full confidence in the water utility. This also includes looking carefully at pretreatment ordinances, collection systems, resource recovery treatment processes, and the most advanced water purification processes.

One cornerstone of the feasibility study is a demonstration-scale project. Not only will this project show that treatment technologies are able to perform and meet stringent regulations, but community leaders and the general public also will be able to visit and see water purification processes in action. The public will be able to meet with the utility’s operations and laboratory staff, and these events will showcase the agencies’ technical skills and dedication to quality and also give the utility an opportunity to interact and share ideas with customers.

Building trust and confidence with each community is vital. The Northern Nevada Regional Effluent Management Team driving this feasibility effort includes representatives from the City of Reno, Truckee Meadows Water Reclamation Facility, Truckee Meadows Water Authority, the City of Sparks, Washoe County, and the Northern Nevada Water Planning Commission. It is an exciting time to be in the water business, and the Northern Nevada Effluent Management Team demonstrates that utility leaders take the trust the public has afforded them very seriously.

“The information provided in this article is designed to be educational. It is not intended to provide any type of professional advice including without limitation legal, accounting, or engineering. Your use of the information provided here is voluntary and should be based on your own evaluation and analysis of its accuracy, appropriateness for your use, and any potential risks of using the information. The Water Environment Federation (WEF), author and the publisher of this article assume no liability of any kind with respect to the accuracy or completeness of the contents and specifically disclaim any implied warranties of merchantability or fitness of use for a particular purpose. Any references included are provided for informational purposes only and do not constitute endorsement of any sources.”
Celebrating 100 Years of Excellence

Experts in Municipal and Contractor Environmental Solutions

Kentucky’s Premier Dealership

EQUIPMENT SALES • SERVICE • PARTS • ROAD SERVICE

Proudly Representing

www.BestEquipmentCo.com
KWWOA Chapter—Do You Know Your Chapter Officers?

**Eastern Chapter Counties:** Bath, Bell, Boyd, Breathitt, Carter, Clay, Elliott, Fleming, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Magoffin, Martin, Menifee, Montgomery, Morgan, Owsley, Perry, Pike, Powell, Rockcastle, Rowan, Whitley and Wolfe.

**Officers:**
- Katie Avera, President, 606-682-0887, kavera@eco-tech.net
- Brad Reed, Vice President, 859-432-5746, hctwwtlab@mswatersewer.com
- Tim Goble, Secretary, 606-226-3554, timgoble.pucc@gmail.com
- Joe Dunaway, Jr., Treasurer, 606-748-8778, joedunaway@altiusbb.com
- Roy Gray, Water Rep, 606-864-7611, manchesterwtp@yahoo.com
- James Poindexter, Water Rep, 606-864-7611, jamesepoindexter@yahoo.com

**North Central Chapter Counties:** Anderson, Boone, Bourbon, Boyle, Bracken, Campbell, Carroll, Clark, Estill, Fayette, Franklin, Gallatin, Garrard, Grant, Harrison, Henry, Jessamine, Kenton, Lincoln, Madison, Marion, Mason, Mercer, Nicholas, Owen, Pendleton, Robertson, Scott, Shelby, Spencer, Trimble, Washington, and Woodford.

**Officers:**
- Stewart North, President, 859-223-1444, sanorth@sourcetechnologiesllc.com
- Matt Piccirillo, Interim Vice President & Secretary, 859-441-0482, picciril@nkywater.org
- Nathan Hodges, Secretary/Treasurer, 859-441-0482, nhodges@nkywater.org
- Brian Bourne, Water Rep, 502-229-2396, BBourne@fewpb.com
- Matt Chancellor, Wastewater Rep, 859-327-0225, mchancellor@gmwss.com

**Central Chapter Counties:** Adair, Allen, Barren, Breckinridge, Bullitt, Butler, Casey, Clinton, Cumberland, Edmonson, Grayson, Green, Hardin, Hart, Jefferson, Larue, McCracken, Meade, Metcalfe, Monroe, Nelson, Oldham, Pulaski, Russell, Taylor, Warren, and Wayne.

**Officers:**
- Robin Strader, President, 270-259-3311, rdstrader@windstream.net
- David Huffman, Vice President, 270-404-4809, Huffmans@srtc.com
- Mandy Spaulding, Secretary/Treasurer, 270-862-4340, aspalding@hcwd.com
- Shaun Youravich, Water Rep, 270-737-1056, ext. 304, Youravich@hardincountywater2.org
- Jacob Billingsley, Wastewater Rep, 270-670-3751, jbillingsley@glasgowh2o.com
- Jeremy Woosley, Director of Water, 270-879-8632, jwoosley@wrecc.com
- Bradley Johnston, Director of Wastewater, 270-351-6270, Bradley.johnston@veolia.com

**Western Chapter Counties:** Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, and Webster.

**Officers:**
- Jimmy Grimm, President, (270) 217-4108, jimmy.grimm@fortiline.com
- Chris Spriggs, Vice President, (270) 824-2145, cspriggs@madisonvillegov.com
- Darran Rankin, Secretary/Treasurer, (270) 444-5581, drankin@pwwky.com
- Leslie Rogers, Water Rep, (270) 887-4232, lrogers@hwea-ky.com
- Alan Todd, Wastewater Rep, (270) 824-2170, atodd@madisonvillegov.com
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Date</th>
<th>Training Cost*</th>
<th>Location of Training</th>
<th>Type of Training**</th>
<th>Hours**</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central</td>
<td>Jan. 17 &amp; 18</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>Berea Folk Center Berea, KY</td>
<td>General &amp; Drinking Water</td>
<td>6 DW 12WW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statewide</td>
<td>April 9–13</td>
<td>$175—KWWOA Members $215—Non-Members</td>
<td>Crowne Plaza Louisville, KY</td>
<td>Water and Wastewater</td>
<td>18</td>
</tr>
<tr>
<td>Central</td>
<td>April 27</td>
<td>$100—KWWOA Members $150—Non-Members</td>
<td>Fire Training Center Glasgow, KY</td>
<td>Motor Controls Workshop (Multi-meter given to all attendees)</td>
<td>6 DW &amp; WW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Central</td>
<td>May 10</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>VFW Frankfort, KY</td>
<td>Water and Wastewater</td>
<td>6</td>
</tr>
<tr>
<td>Western</td>
<td>May 16 &amp; 17</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>KY Dam Village State Resort Park Gilbertsville, KY</td>
<td>Water and Wastewater</td>
<td>12</td>
</tr>
<tr>
<td>Central</td>
<td>May 18</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>Hardin County Water Dist. No. 2 Elizabethtown, KY</td>
<td>Trenching &amp; Shoring</td>
<td>6 DW &amp; WW</td>
</tr>
<tr>
<td>Eastern</td>
<td>May 18</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>London Wastewater Plant London, KY</td>
<td>Water and Wastewater</td>
<td>6</td>
</tr>
<tr>
<td>Central</td>
<td>June 6</td>
<td>$100—KWWOA Members $150—Non-Members</td>
<td>Hardin County Water Dist. No. 1 Radcliff, KY</td>
<td>Advanced Pipe Cleaning Workshop</td>
<td>6 WW</td>
</tr>
<tr>
<td>Eastern</td>
<td>June 7</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>Mountain Arts Center Prestonsburg, KY</td>
<td>Water and Wastewater</td>
<td>6</td>
</tr>
<tr>
<td>Central</td>
<td>June 15</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>Ronald H Hudson Fire Station No. 1 Leitchfield, KY</td>
<td>Confined Space</td>
<td>6 DW &amp; WW</td>
</tr>
<tr>
<td>KLA</td>
<td>August 8-11</td>
<td>$100—KWWOA Members $150—Non-Members</td>
<td>Grayson County Water District Leitchfield, KY</td>
<td>Aug. 8-10 Cert. Review Session Aug. 11—Exam***</td>
<td>18</td>
</tr>
<tr>
<td>Central</td>
<td>Sept. 27-28</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>Barren River State Resort Park Glasgow, KY</td>
<td>Water and Wastewater</td>
<td>12</td>
</tr>
<tr>
<td>Central</td>
<td>October 19</td>
<td>$100—All attendees</td>
<td>Fire Training Center Glasgow, KY</td>
<td>Motor Controls Workshop (Multi-meter given to all attendees)</td>
<td>6 DW &amp; WW</td>
</tr>
<tr>
<td>North Central &amp; Eastern</td>
<td>Oct. 24-26</td>
<td>$30—KWWOA Members $75—Non-Members</td>
<td>4 Points by Sheraton Lexington, KY</td>
<td>Water and Wastewater</td>
<td>18</td>
</tr>
<tr>
<td>Eastern</td>
<td>November 16</td>
<td>Free—KWWOA Members $50.00—Non-Members</td>
<td>Morehead Utility Maintenance Dept. Morehead, KY</td>
<td>Water and Wastewater</td>
<td>6</td>
</tr>
<tr>
<td>Central</td>
<td>December 7</td>
<td>Free—KWWOA Members</td>
<td>Elizabethtown County Club Elizabethtown, KY</td>
<td>Holiday Awards Banquet</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Pricing could reflect an *early bird registration price.*

**It is the intent of the KWWOA to solicit the KY Division of Compliance Assistance and the Boards of Certification for approval of the hours and type of training referenced above prior to the class. Once the class has received Board approval, a notice will be posted on the KWWOA website for that particular class. If you need these hours for renewal purposes and/or the specific topic referenced, you should inquire ahead of time as to whether approval has been received.

***Must be prequalified for this exam.
2017 Membership Application/Renewal Form

Please check the appropriate boxes and print clearly.

Refer to the list of counties on our website at www.kwwoa.org, to determine which Chapter serves your area.

□ - Western  □ - Central  □ - North Central  □ - Eastern

□ - New Member  □ - Membership Renewal

Name: ___________________________________________  Agency Interest No. _______________________________

Home Address: ___________________________________________  County: ______________________________

City: ___________________________________________  State: _________  Zip Code: _______________________

Employed By: _______________________________________________________________________________________

Business Address: __________________________________________________________________________________

City: ___________________________________________  State: __________  Zip Code: ______________________

Phone: (Home) (_________) ___________  -  (Business) (_________) ___________

Email: (Home or Business) _______________________________________________________________________________________

Where would you prefer to receive KWWOA information/training announcements?

□ - Home  □ - Business

If a valid email is provided, it will be utilized to ensure that you receive KWWOA information more quickly.

NOTE: Associate Members should not use this form. Associate Membership Applications may be found at www.kwwoa.org.

Active Membership  □ - By February 28, 2017...............$40.00  □ - Postmarked March 1, 2017 & after ............ 60.00

Active membership is designed for those who actually hold a valid water or wastewater license and/or who are employed in a water or wastewater utility. This includes administrative staff, pretreatment and/or lab technicians as well.

□ Honorary Membership........................................................................................................................................Free

Honorary membership is designed for those who are retired from the water or wastewater field and held an active membership in the KWWOA during the previous calendar year. There is no fee for Honorary membership.

□ KLA Membership...............................................................................................................................................$10.00

This fee is in addition of the Active Membership fee above.

TOTAL ____________

Please forward this application and a check or money order, payable to KWWOA, to the address below. You may also elect to renew online, paying through PayPal at www.kwwoa.org.

KWWOA
P.O. Box 700
Lawrenceburg, KY 40342
KWWOA
P. O. Box 700
Lawrenceburg, KY 40342

KWWOA STATE BOARD

David Goodrum, Chairman
goodrum@sorte.com

Robin Strader, Vice-Chairwoman
rdstrader@windstream.net

Lori Simpson, Secretary
simpson@nkwater.org

Julie Duncan, Treasurer
watergirl@kfh.net

Brian Bourne, Rep., NCKWWOA
BBourne@fewpb.com

Matt Chancellor, Rep., NCKWWOA
mchancellor@gmwss.com

James Polndexter, Rep., EKWWOA
jamesepolndexter@yahoo.com

Roy Gray, Rep., EKWWOA
manchesterwtp@yahoo.com

Jacob Billingsley, Rep., CKWWOA
jbillingsley@glasgowh2o.com

Shaun Youravich, Rep., CKWWOA
youravich@hardincountywater2.org

Alan Todd, Rep., WKWWOA
atodd@madisonvillegov.com

Leslie Rogers, Rep., WKWWOA
lrogers@hwea-ky.com