WE DON’T MASK THE TRUTH

Other tank companies suggest epoxy coatings are ‘fused’ to steel. Let’s clear up the Con-Fusion.

REALITY: FUSION ONLY OCCURS AT >1000°F

Aquastore® fuses our porcelain enamel to steel at 1500°F to create the strongest bond possible.

EPOXY CAN’T BE FUSED TO STEEL... PERIOD.

Glass-fused-to-steel tanks are the premium technology for liquid storage tanks. Simply stated, there is nothing better than glass. When evaluating your storage tank needs, know the facts and specify quality, experience and low maintenance based on field proven technology.

Don’t be fooled...
Message from the Chair ................................................................. 4

2016 Nominations for the Board .................................................... 4

New Guidance Document for Utilities Available ............................ 5

The Value of Water ........................................................................ 6

Education Committee Update ........................................................ 7

United Water Westchester ............................................................... 8

United Water New York ................................................................. 9

Is Fracking in New York Really Dead .......................................... 10

Member News ................................................................................ 12

TOP OPS Competition .................................................................. 13

29th Annual Tap Water Tasting Contest ...................................... 18

2016 Sponsorships Available ....................................................... 19

Edwin C. Tifft Jr. Water Supply Symposium ................................. 21

Legionnaires Disease and Risk Migration .................................... 26

Cover photo taken at Bear Mountain State Park

The concepts, ideas, procedures and opinions contained in this publication are those expressed by the various authors. New York Section AWWA, its board of governors, the editor, executive director and staff assume no responsibility for any errors or omissions in the articles presented in this publication. The concepts, ideas, procedures and opinions are not necessarily recommended or endorsed by NYSAWWA.
Message from the Chair

By Richard Tobin, Superintendent of Plainview Water District

The Section recently held its annual summer planning workshop on Long Island and it’s always an inspiration to be surrounded by so many truly dedicated professionals whose sole mission is to create a “Better World Through Better Water”. This is the vision the Section has embraced as we move into the next century of our existence. The summer planning workshop is a forum that is utilized to bring together the Section Board, staff and committee chairs in order to plan the direction and activities of the Section for the coming year. The plans made at this workshop are aimed at improving and increasing the services offered to our members as well as to determine new ways to recruit new and retain existing members.

It also amazes me, for being a volunteer organization, the amount of time and effort the Board, committee chairs and committee members put forth each and every year to bring you, our members, the resources and educational opportunities that are aimed at increasing your knowledge and hopefully being the professional resource that enables you to perform your job more efficiently.

At this year’s workshop discussions were held regarding; the financial stability of the Section; revision of the Sections Strategic Plan; ways to improve and expand Section events and conferences; Section committee structure; Section training opportunities and other topics aimed at improving the Section and providing its sustainability well into the future. With regards to the committee structure, the ad-hoc Sustainability committee was sunsetted rather than becoming a standing committee, and is now part of the Program Committee. In addition, discussions were held regarding the membership committee and ways the Section can get our message out to all utilities, members and non-members, through regionalization so that all New York State water utilities can take advantage of the many opportunities the Section has to offer as a member.

If you attended the recent Tifft Symposium, you will also notice that the Section is establishing an Administrators/Public Officials certification program to be held at both its Annual Conference and the Tifft Symposium. This program offers sessions that allows Administrators and Public Officials to understand what we as water professionals do and the complexities of the work performed. Topics would include rates, budgets, public relations and human resources. In addition, the Section is exploring the possibility of recognizing and presenting awards to Public Officials for achievements made in the water industry.

Volunteering is renowned for skill development, and is intended to promote goodness as well as to improve human quality of life. Volunteering has many positive benefits for the volunteer as well as for the person or community served so please consider volunteering on one of our many committees. There is a committee for everyone and the variety of the Sections committees makes it easy to find one that encompasses your interest or passion within the water industry.

Again, I would like to thank all of our members, volunteers, Board members, Section Staff and Committee Chairs for helping to make the NYSAWWA the success it is today. I look forward to working together and continuing this success into the future.

2016 NOMINATIONS FOR THE BOARD

The Trustee Nominating Committee is responsible for presenting nominations for the Trustee and Trustee-at-Large positions to the Board of Governors. The Trustee Nominating Committee members include: Paul Granger, Chair; Mike Marino; Amanda Bauner; Dan Seaver; and Kevin Castro.

The Nominating Committee reviews each potential candidate for the Trustee and Trustee-at-Large positions; a candidate or candidates for each position will be presented to the Section Board of Governors. Outside of being nominated by the local water works conferences, individuals can submit a petition signed by a minimum of 20 active members to the Section office no later than January 1, 2016. Should there be more than one candidate for either position, Section membership will vote and the winner will be announced at the Section’s annual meeting in April 2016.

If you have any comments or questions regarding the Trustee Nominating process, please contact Jenny Ingrao, Executive Director at 315-455-2614 or email jenny@nysawwa.org.

Now Seeking Nominations for NYSAWWA Board of Governors Assistant Treasurer

The NYSAWWA is seeking nominations for the Board of Governors Assistant Treasurer position. This position is a three year role beginning in April 2016 with option to renew once. The role of the Assistant Treasurer include: working with the Treasurer and Section Office to develop and submit financial reports at each Board Meeting, safeguard and manage the Section’s financial assets; guide budgeting and anticipate financial problems; and participate on Finance Committee (consisting of Chair, Vice Chair, Past Chair, Treasurer, Assistant Treasurer, Executive Director).

If you are interested in submitting a nomination for the Assistant Treasurer, applications must be received by January 4, 2016 by 5:00 pm. For applications or for more information contact Jenny Ingrao, Executive Director at 315-455-2614.
WWA has released a new guidance document for utilities titled “Radionuclide Rule Compliance: Utility Guidance on Analytical Methods”. The guide is intended to assist utilities in many regions of the United States that are challenged by compliance issues associated with the federal Radionuclide Rule, in large part due to the performance limitations with the existing approved analytical methods for radionuclides such as gross alpha activity, radium-226 (226Ra) and radium-228 (228Ra).

Available as a free download, this guidance provides criteria for utilities to:

- Evaluate performance of laboratories as pre-qualifications for bids when maximum accuracy is important;
- Set requirements for bid documents to ensure that labs understand the requirements; and
- Evaluate the data upon receipt to ensure that the laboratory met the requirements.

This guidance provides flow charts and tables to assist utilities in obtaining the best quality data, given limitations of existing methods, when radionuclide activity is near various compliance points.

The U.S. Environmental Protection Agency also has information available to assist utilities in understanding the compliance requirements associated with the Radionuclide Rule.

US EPA Requirements Link - http://water.epa.gov/lawsregs/rulesregs/sdwa/radionuclides/
The Value of Water

What is the value of water? Essential. Reliable. Invaluable. Water—it’s the thread that weaves together our daily lives. It keeps our communities healthy, our cities running, and our economies growing. Water is a cup of coffee, the produce aisle, better production, increased exports, and greater American strength. While essential, water infrastructure is largely invisible. Few people realize what it takes to treat and deliver drinking water every day or how wastewater is cleaned so that it can be safely reused or returned to the environment. The high quality of life we enjoy in America would not be possible without water and the infrastructure that fuels it.

The Value of Water Coalition builds national will for investment in water infrastructure and water resources. They are an alliance of public and private water agencies, community and business leaders, and national organizations, united in communicating the importance of water to the economic, environmental and social well-being of America. With one voice, they educate and engage the public on the importance of clean, safe, and reliable water and help ensure quality water service for future generations.

How can you make a difference? Simple, get involved and help to educate others on the Value of Water! The Value of Water Coalition now has resources to make educating local decision-makers, stakeholders and customers about how water is essential, invaluable, and worthy of investment. These materials were collaboratively developed by our Coalition members and draw from decades of experience in communicating the value of water.

These materials are free resources to be downloaded and used as is, or you may add your organization’s logo and website to show the connection to water in your area. Please use these materials in however they can best meet your needs, whether through bill stuffers, outdoor advertisements or talking points to be delivered at your next public speaking opportunity. Visit http://thevalueofwater.org/mediakit/preview to access the toolkit and begin shifting how Americans value water.

WHAT’S THE VALUE OF WATER?

There are nearly 400,000 house fires in the U.S. each year, and water that flows from hydrants is our best defense.

Most of us never think about how water gets to us. Luckily, we don’t have to. Pumps, treatment plants, and pipes bring us clean water and carry away wastewater. All day, every day.

But our water systems are aging. They need investment to continue delivering life’s most essential resource.


Learn how water works for you. Visit TheValueofWater.org.

Presented in cooperation with the Value of Water coalition

#ValueWater

Value of Water Coalition
The New York State Section Education Committee is preparing our 2016 Education schedule and will continue to work to provide quality operator training sessions around New York State. The effort put forth by our speakers is appreciated as the courses that they provide assist our state operators in developing new knowledge as well as meeting their NYSDOH recertification requirements. The Education Committee is also working on locating new training locations and presenting several new courses. Among the anticipated new courses are a water/wastewater math session; a presentation on chemical safety and OSHA chemical labeling requirements; and a session on conducting a sanitary survey of your water treatment and distribution system and a review of the causes of disease outbreaks. The disease outbreaks component of the third session includes case studies which demonstrate how changes in raw water quality, technological breakdowns and human error can all conspire to result in the delivery of poor water quality.

But to continue the educational effort in New York, our Section Education Committee can use assistance. We have access to numerous courses through the national AWWA office……but we lack the people to deliver additional training sessions. Whether you are a young engineer or an experienced superintendent in either a utility, health department or consulting engineering firm, we need you!! Delivering a training session not only helps the water utility industry and individual operators, but is also a great way to develop your knowledge and presentation skills.

We also need new locations that can be utilized as training sites. To be a training site, a conference room or meeting room is needed, as is a laptop and projector. Some of our current training sites include a treatment plant meeting room, City Hall, a VFW, fire hall……any location that 12 – 15 operators can gather.

In addition, one person at the site is responsible for being the “site coordinator”. The coordinator receives the registration package for the session, oversees the signing in and signing out of attendees, assists the presenter as needed and returns the registration package to the Section office upon completion of the course so that attendance certificates can be emailed to those who attended. The coordinator also purchases food and drink for the day, for which you are reimbursed. And for that work, the sponsoring utility receives two complimentary enrollments for the session.

We are especially hopeful of locating new training sites in the southern tier and the Catskill region of New York. And we’d like to challenge our engineering members in those two regions and elsewhere in the State. If you are a consulting engineering firm and have a meeting room and AV equipment that can be utilized for training, please consider sponsoring a training session with the Section. It’s a benefit your local operators would appreciate. And since most of our training sessions carry Professional Engineer PDH credits, hosting a session and receiving complimentary registrations can become a very cost effective way for your staff to receive training.

We would really appreciate your help in continuing our Section’s education efforts!! If you are able to assist the Section in the area of speaking or providing a training location, please contact Trina Carman, Training Coordinator at 315-455-2614.
United Water Westchester

Design & Management of District Metered Areas

By Nick Curcio, Non-Revenue Water Manager

United Water Westchester developed a District Metered Area program which resulted in early identification of leaks, notable reduction of non-revenue water, lower costs associated with purchased water, and compliance with regulatory standards for permissible amounts of non-revenue water. An important component of the program involved the first U.S. implementation of a Suez Environnement computer program called “Aquadvanced.” By comparing the flow entering and exiting the District Metered Area with expected usage, the team has been able to quickly find and address leakage.

The company completed the system-wide district flow metering project as part of an overall distribution system management and water loss reduction strategy. The team created sub-metering districts which strategically divided the distribution network into 19 smaller, more manageable-sized zones called District Metered Areas (DMAs). Each DMA can be treated as a separate water system from a production and consumption standpoint. This allows for high resolution water audits and non-revenue water profiles to be developed for each of these sub-districts.

A total of 61 high-accuracy magnetic flow meters were installed to create 19 sub-districts, each consisting of approximately 1,500 to 3,800 service connections. The battery-operated, direct buried meters monitor flows entering and leaving the DMAs on a real-time basis. The data is wirelessly transmitted to United Water’s SCADA operational reporting platform via custom-built data recording and telemetry pits at each meter site. The data is then captured by the Aquadvanced tool to process the information and present it to the user in a graphical format.

Leakage/real-loss reduction led to lower non-revenue water (NRW) levels, greater operational efficiencies, and significant reductions in purchased water costs. The company now has the ability to detect non-surfacing leaks, which has significantly reduced the time it takes to identify and resolve non-surfacing leaks. The overall water loss reduction achieved since the system was completed in January 2014 through July 2015 is approximately 608 million gallons, resulting in a cost savings of approximately $1.385 million, and will continue to grow as NRW is reduced further. This unique solution to DMA system design and management has enabled the operations team to quickly and efficiently identify, locate, and resolve water loss events and operational anomalies which occur throughout the system. It has enabled the company to continuously monitor system performance and efficiency, and deploy field crews in the most efficient manner.

The solution will also make it easier to perform water loss audits on the zones, and better match production information to customer usage with higher resolution and accuracy. The resulting cost savings will provide for a reasonable payback period of the initial capital investment, and enable the company to meet more stringent regulatory requirements surrounding water loss reduction and system efficiency.

Additional benefits of implementing DMAs

Find-to-fix times are minimized for new/developing leaks and non-surfacing leaks. It is more efficient to identify and repair a non-surfacing leak in its early stages before it turns into a full main break which requires emergency repair. This prevents problems associated with customer inconvenience, loss of water, boil water orders, road damage or traffic disruptions.

Conserving water and pumping less water reduces power needs and costs associated with treatment chemicals.

Reducing NRW helps achieve compliance with NY State Public Service Commission standards.

Reducing NRW has the potential to reduce costs associated with purchased water as well as the potential to defray the need to put new water supplies in service.

This is a Siemens MAG8000 installed on a water main in United Water Westchester’s service district. Conduits carry the meter data back to the telemetry pit at the curb.

This is an open telemetry pit in United Water Westchester’s service district. It houses the MAG meter head, Telog data logger, and wireless communication.

The graphic shows the DMA data evaluation, leak localization, and repair process, along with a schematic of United Water Westchester’s DMA zones.
United Water New York

Use of Recycled Glass as Backfill Material

By Hetal Mistry, P.E., Senior Project Engineer

United Water New York routinely utilizes virgin stone material to bed water mains and backfill trenches associated with the installation of water mains. The Rockland County Solid Waste Management Authority collects and processes used glass material from county residents and provided the material to United Water (at no cost).

To understand more about the usability of this product in practice, the crushed recycled glass was pilot tested as backfill for the trench of a 12-inch water main replacement project. The material is approved by the New York State Department of Transportation for various applications. It was also approved by the Town of Orangetown and the Rockland County Health Department. As detailed below, the product has proven to be effective, cost efficient, and environmentally sustainable.

In Rockland County, a water main is required to be encased in controlled low strength material (CLSM) if it is within 10-feet laterally or 18-inches vertically of a storm or sanitary sewer main. For this pilot, United Water evaluated the compaction of the backfill materials within the water main trench under a set of four field conditions:

- Without crushed recycled glass product and without CLSM
- Without crushed recycled glass product and with CLSM
- With crushed recycled glass product and without CLSM
- With crushed recycled glass product and with CLSM

Based on visual observation of the water main trench after one year, it appears that the crushed glass under all conditions behaved a similar manner. This means that there was no difference in the level of compaction whether the trench was backfilled with crushed recycled glass or virgin stone.

The use of crushed glass allows for the beneficial reuse of material that would normally be disposed of as solid waste in a landfill. In addition, the use of the crushed glass is a green alternative to the use of virgin stone material which needs to be mined, crushed, and processed. The use of crushed glass can reduce the environmental impact of company activities and the carbon footprint of the job.

Over the course of the pilot, the use of crushed recycled glass resulted in a cost savings of about 35% versus utilizing virgin backfill material.

In conclusion, the use of crushed recycled glass is a viable alternative to the use of virgin crushed stone. This material should be considered for underground asset replacement projects pending approval from the local road agency having jurisdiction and the local water supply agency.
Is Fracking in New York Really Dead?

By Paul J. Granger, P.E. – H2M Water

Back in June the NYSDEC issued its findings statement that officially prohibited High-Volume Hydraulic Fracturing (HVHF) in New York State. With the NYSDEC Commissioner sternly stating that “After years of exhaustive research and examination of the science and facts, prohibiting high-volume hydraulic fracturing is the only reasonable alternative” one would think that the thought of HVHF in New York would not be raised again for many years if not decades. Well think again…… just like my favorite baseball philosopher….Yogi Berra…. once said “It ain’t over until it’s over.”

The ban could be lifted with a new administration, change in technology, increase in natural gas prices, establishment of case law to support HVHF and more scientific information. Right now we are not seeing a drastic change in politics nor a new administration on the horizon. However along the line of changing technology a proposal to frack for natural gas using gelled propane and sand was recently announced and proposed in the southern tier Tioga County. Two applications were recently filed with the DEC drill a well using gelled propane instead of water. The applications propose to use a combination of gelled propane and sand to hydraulicly fracture Marcellus Shale and release natural gas. The applicants are using a legal loophole since fracking in general was not banned only high volume hydraulic fracturing has been. Therefore the applications are seeking to develop the well under a New York state Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program from 1992. The waterless fracking method could revive the fracking debate in New York. So far opponents argue gelled propane fracking still causes air pollution and increases the risk of earthquakes and water pollution.

Energy prices continue to remain at very low levels so economic pressure to increase natural gas production through new HVHF wells is simply not there. The economic outlook for the energy sector is not expected to change drastically.

The NYSDEC ban started a 120-day clock for fracking proponents to examine whether the prohibition has any legal holes. If a lawsuit is not filed by October 27, 2015 then state law prohibits any challenges to the ban. During this past May an East Rochester attorney quietly filed a lawsuit against the NYSDEC to challenge the agency’s decision to prohibit him from fracking on land he owns in Allegany County. Until recently, the lawsuit has garnered little public attention, in part because the attorney initially chose not to publicize it. The challenge could set the stage for the courts to decide whether the statewide ban on high-volume fracking has legal merit and comes as HVHF supporters and energy companies weigh whether to file a lawsuit of their own.

At around the same time the Governor and NYSDEC announced the prohibition of HVHF in New York, the EPA issued a report which concluded that hydraulic fracturing to drill for oil and natural gas has not caused widespread harm to drinking water in the United States. However the draft study issued by the agency also warned of potential contamination of water supplies if safeguards are not maintained. Fracking supporters basically ran with the headline “EPA: No widespread harm to drinking water from fracking” to shoot holes in the New York State ban. However they were probably hopeful that the public would not pay attention to the details contained in the study. The EPA report documented several vulnerabilities to drinking water resources, including fracking’s effect on drought-stricken areas; inadequately cased or cemented wells resulting in below-ground migration of gases and liquids; inadequately treated wastewater discharged into drinking water resources; and spills of hydraulic fluids and wastewater.

So hold on to your hats…… the HVHF issue in New York State is not over and done. This is more like a roller coaster ride. Water purveyors need to be vigilant and stay engaged in the “fracking” discussion to ensure the integrity of our precious source water supply.
For 50 years, D&B has been a leader in environmental engineering and science. Our outstanding achievement includes our expertise on all phases of water and wastewater treatment, including the design and construction of major treatment facilities. D&B is consistently ranked high by major engineering publications, and is steadily growing and providing solutions to our clients.

» Water Supply Services
  » Tank Inspection
  » Water Treatment
  » Surface Water and Groundwater
  » Distribution Design

» Wastewater Collection & Treatment
  » Construction Management
  » Storm Water Management
  » Municipal Engineering
  » Green Infrastructure
  » Architectural Services
**Member News**

**H2M CFO Named ACEC Trustee**

We are proud to announce that Gregory C. Smith, CPA has been named trustee of the American Council of Engineering Companies Retirement Trust (ACEC RT). Mr. Smith is the Chief Financial Officer (CFO) of H2M architects + engineers in Melville, NY. Mr. Smith’s term as trustee will begin on October 1. He will be serving ACEC RT’s Region 2, which includes New York, Pennsylvania, Ohio, Indiana, Michigan and northern Wisconsin.

“I am deeply honored to be selected as one of seven trustees across the United States,” Mr. Smith said. “I look forward to contributing to the organization and making a positive impact.”

In his 28-year tenure with H2M, Mr. Smith has worked his way from controller to CFO. He is a member of the firm’s Board of Directors and also serves as a trustee of its 401(k) plan.

ACEC Retirement Trust provides a full spectrum of investment options and retirement plan services for ACEC members and oversees a program that provides retirement plan services for participating ACEC members. Its objective is to deliver positive retirement outcomes for its member companies and their participants. To accomplish this objective, the Trustees and their highly credentialed experts work to develop customized solutions.

ACEC consists of council members – numbering more than 5,000 firms representing more than 500,000 employees throughout the country – that are engaged in a wide range of engineering works that propel the nation’s economy, and enhance and safeguard America’s quality of life. These works allow Americans to drink clean water, enjoy a healthy life, take advantage of new technologies, and travel safely and efficiently. The Council’s mission is to contribute to America’s prosperity and welfare by advancing the business interests of member firms.

Mr. Smith holds a B.S. in Accounting from St. John’s University, and is a member of the American Institute of Certified Public Accountants and the New York State Society of Certified Public Accountants. He resides in Dix Hills, NY with his wife, Kristin, and children, Patrick, Katie and Emily.

**H2M Welcomes Newest Addition**

H2M architects + engineers is pleased to announce the addition of William Rospars as corporate counsel, who will strengthen and support risk management and contract negotiations as the firm continues to grow.

Mr. Rospars joins H2M with decades of risk management, program management and negotiating experience as a Commander and Judge Advocate in the U.S. Coast Guard. He has represented federal agencies, insurance companies, small businesses, property owners, architects and engineers in a multitude of business transactions, administrative proceedings, and litigation. Since 2005, he has maintained private law practices in Jericho, NY and Delray Beach, FL. He has also been brokering commercial real estate deals since 2013.

“Our recent growth, further diversification and ability to secure new and exciting projects has provided the opportunity to expand our overall risk management program, and with that, the advent of a new position to H2M in corporate counsel,” H2M’s President and Chief Executive Officer, Rich Humann, said. “By working closely with Gary [Loesch], who has managed our risk management program for years, I’m looking forward to the value Bill will bring not only to our business, but to our people.”

“Bringing in Bill Rospars enhances H2M’s risk management program and supports the firm’s continued growth and geographical expansion into other regions in the Northeast,” H2M’s Chief Operating Officer and Executive Vice President, Gary Loesch, said.

“Having collaborated with H2M in the past, I was always impressed with their professionalism and corporate culture, and am happy to be a part of their team,” Mr. Rospars said. “I’m excited to work for a company that is both growing to serve other geographic markets, and is remaining dedicated to rebuilding infrastructure here on Long Island.”

Mr. Rospars earned his B.S. in Civil Engineering from the U.S. Coast Guard Academy, his MBA in Real Estate from Hofstra University, and his Juris Doctor from Columbia University. He currently resides in Oyster Bay and is an avid boater, musician, and athlete.
TOP OPS Competition

by John Nappi and Timothy McGuire

The 9th Annual NYSAWWA Top Ops Competition was held in April at the Spring Meeting in Saratoga Springs. A total of three (3) teams competed including Monroe County Water Authority, Town of Canandaigua Water Department, and the Long Island Water Conference representatives from Plainview Water District. The Monroe County Water Authority Team, once again, had an impressive showing in their third straight win. The Monroe County Water Authority winning team members include Christine Thornley, Michael Terrore and Derek McKeon.

After their win at Saratoga, the Monroe County Water Authority Team traveled to Anaheim, CA in June, to compete in the National Top Ops Competition at the ACE ’15. This was the third straight trip to the National Competition for the Monroe County Water Authority team. The Monroe County Water Authority ACE competition team members include Christine Thornley and Michael Terrore. They finished in 6th place out of 19 teams, narrowly missing out on the semi-finals. Congratulations to the Monroe County Water Authority Top Ops Team for their strong showing in both the NYSAWWA and ACE competitions.

Congratulations Silver, Gold, and Lifetime Members

Silver and Life – Susan Boutros
Silver and Life – James Richard Campolong
Life – John Caruso
Silver and Life – Donald Chalanick
Silver and Life – Robert Denz, PE
Silver – Timothy Gottlieb
Gold – James Jerman
Silver and Life – Robert Kukenberger
Silver and Life – John Lanc
Silver and Life – James Longworth
Silver – Thomas McEnerny
Silver – James Nugent
Silver – William Perkins
Silver – Richard Peters
Silver – Frank Schifano
Silver – Anne Seeley
Life – Bruce Wernau
Gold – Jacques Wolfner

From the source to the tap, trust H2M with your H2O.

Serving the New York State water supply industry with comprehensive and cost-effective water engineering and water storage tank inspections since 1933

H2M
www.h2m.com

WHEN ONE ISN'T ENOUGH...
WE'LL BUILD YOU ANOTHER

To meet their growing demands, many municipalities come back to us again and again to build them a second tank, or a third, or more. And that's the biggest compliment we can receive. Call us today to find out why our clients keep coming back for more.

JAMIE HOWARD
REGIONAL MANAGER
Jamie.Howard@DNTanks.com
917.826.2544

TWO 1.5 MG TANKS BUILT FOR THE VILLAGE OF NEW PALTZ, NY
Got **wood pipes**?

If you're counting the rings on your water pipes to determine the age of your water infrastructure or guessing at the condition of your water system assets, it might be time for an Asset Management Plan.

Hundreds of our clients have counted on GHD for condition assessment, risk assessment and prioritization of improvements and investment needs for their water system infrastructure.

Additional services include:

- System mapping
- Water demand analysis
- Watermain break/leak history analysis
- Hydraulic modeling
- Maintenance management systems
- Design and construction services
- Funding assistance
- Operations review and assistance

Give Kevin Castro a **ring** at *(315) 679 5785*
Manage Your Pipelines.

- Leak Detection
- Condition Assessment
- Real Time Monitoring
- Prioritization and Risk Assessment
- Estimating Remaining Service Life
- Transmission Mains & Sewer Force Mains
- PCCP / Bar-Wrapped / Ductile / Cast / Steel

pure
TECHNOLOGIES

8920 State Route 108
Columbia, MD
USA 21045
(443) 766-7873

3322 State Route 22 West
Branchburg, NJ
USA 08876
(908) 526-6600

puretechltd.com

16  FALL/WINTER 2015 AQUARIUS
QUALITY & INNOVATION SINCE 1879

MADE IN USA

WWW.ROSSVALVE.COM

Automatic Control Valves & Pre-Packaged Vaults for Water & Wastewater

THE SYMBOL OF QUALITY

1-855-ROSS VALVE
PO BOX 595 TROY, NEW YORK 12181

SLUICE GATES - SLIDE GATES - STOP LOGS
STOP GATES - FLAP GATES - TELESCOPIC VALVES
MUD VALVES - SHEAR GATES

EXPERIENCE BETTER WATER CONTROL

THE NEW SYMBOL OF QUALITY

(518) 874-4750
79 102nd St. Troy, New York, USA, 12180

WWW.RWGATE.COM

A Ross Valve affiliated company
MADE IN USA
On behalf of the Water and Wastewater Education and Outreach Committee and the New York State Department of Health, we would like to extend our sincere Thanks to all that participated in the 29th annual Tap Water Taste Contest (TWTC). This year was a great success due in part to all of our public water supply participants and wonderful volunteers. We would like to congratulate the regional winners which are:

- Western Region – Village of Lyndonville
- Central Region – City of Ithaca
- Northern Region – Blue Mountain Lake Water District
- Capital Region – City of Schenectady
- Metropolitan Region – City of Mt. Vernon

We would also like to congratulate the winner of the 29th annual TWTC, Blue Mountain Lake Water District. The winner was announced on September 1, 2015, at the New York State Fair, after nearly 200 fairgoers cast their vote for New York’s best tasting tap water. Each regional winner as well as the 29th annual TWTC winner were presented with a plaque noting their achievement. It was great day for all of us to raise awareness on the value and the quality of public tap water through a non-scientific and publicly involved contest.


Again, thank you for all that you do to promote the value of water and we look forward to seeing you at the 30th anniversary of the Tap Water Taste Contest!

Sincerely,
Teresa M. Boepple-Swider, P.E.
Assistant Director
Bureau of Water Supply Protection
New York State Department of Health
2016 Sponsorships Now Available

Want to make a splash at New York Section American Water Works events? We have advertising options that will fit into all budgets! Each year NYSAWWA hosts two major events, New York Water Event and Edwin C. Tifft Jr. Water Supply Symposium. This year’s 2016 Sponsorship Opportunities include advertising for both events and more.

There are three sponsorship levels that include: the top level sponsorship Gold - $3,750; followed by Silver - $2,750 and Bronze - $1,500. There is also an à la carte sponsorship - options range in price from $300-$1,500.

Your generous sponsorship would be highlighted in just a few of the following ways: Company logo on all event announcements and promotional materials; Signage recognizing contribution at the event; Free booth space; and more.

For questions and more information contact Jenny Ingrao, NYSAWWA at 315-455-2614 or email jenny@nysawwa.org. We look forward to hearing from you and working together!
Now Accepting Applications

2016 Annual Awards & Recognition

2016 Scholarships

Visit www.NYSAWWA.org to apply.

FALL/WINTER 2015 AQUARIUS

The Most Complete Line of Swing Check and Ball Check Valves.

CALL 800-833-2040

FLOMATIC® VALVES for WATER AND WASTEWATER APPLICATIONS

GRELLEY AND HANSEN

designing better urban environments worldwide

water wastewater infrastructure

greely-hansen.com  "  "  "  YouTube

111 Broadway  New York  800-837-9779
Edwin C. Tifft Jr. Water Supply Symposium (cont.)
Our smart solutions will improve your infrastructure and your community’s quality of life.

- Energy efficiency
- Sustainability
- System optimization

WATER | STORMWATER | WASTEWATER

Think water, think Wendel.

On September 23, 2015 during the Edwin C. Tifft Jr. Water Supply Symposium the New York Section American Water Works Association held their first No Water. No Beerfundraising event. Event goers sampled a variety of beer, networked with fellow water professionals, played games and helped raise money for charity:water. The event raised $1,500 which will help bring clean, safe drinking water to people in developing countries!

A special thanks to John Nappi, Garden City Park Water District for our largest donor of the evening.

Also, a huge thanks to our event sponsors:
Keg Level: Half Time Beverage; Hazen and Sawyer; Master Meter, Growler Level: J. Fletcher Creamer & Sons; and Stein Level: H2M Architects + Engineers.

Are you looking to get more involved in the New York Section AWWA and have passion and expertise in creative design and copywriting?

Contact Executive Director, Jenny Ingrao at 315.455.2614!
Legionnaires Disease and Risk Migration

What Water Suppliers Need to Know

By Paul Ponturo, P.E.
Senior Water Resources Engineer, H2M architects + engineers

Legionnaires Disease (Legionellosis) is a form of pneumonia which was originally uncovered in an outbreak which occurred in Philadelphia in 1976 at an American Legion celebration of the U.S. Bicentennial. Approximately 221 attendees fell ill and 34 died. Legionella bacteria were discovered in the lung tissue of a victim and in the cooling tower of the hotel hosting the convention.

Legionellosis has been a reportable disease in NY State since 1986, and all states now report its occurrence to the Centers for Disease Control. NYSDOH requires all legionella cases to be reported to the local health department where the patient resides. In addition possible or definite healthcare facility-associated cases need to be reported to NYSDOH. Healthcare and hospital cases (often described as “nonsocomial”) in New York range from less than ten to about forty cases reported annually. Nationally, the CDC reports that legionellosis incidence rates have increased threefold during 2000-2009, and estimates between 8,000-18,000 persons are hospitalized annually. Over $34,000 in direct healthcare costs are estimated to be associated with each case in the United States and because occurrence is caused by controllable conditions, frequency of litigation and monetary settlements reportedly have increased as well. Many of these legal cases centered on the contention that proper operation and management of facility environmental systems could have avoided instances of disease.

In the response to the recent legionella outbreak in New York City, the investigation likely involved forwarding patient isolates for confirmatory testing, case surveillance, environmental assessment, formation of a hypothesis for the outbreak’s cause, recommendations and implementation for control measures, and surveillance to determine the efficacy of implemented control measures. Some of these steps are already resulted in a City ordinance addressing one source, building cooling towers. Additional state regulations including requirements for cooling tower registration, sampling, disinfection and maintenance went into effect on August 17, 2015. The NY State requirements can be found on-line at: http://www.ny.gov/services/register-cooling-tower-and-submit-reports.

Legionella are widespread in natural water, and also found and distributed in man-made environments. About 48 legionella species have been identified with approximately half associated with human disease. One species, L. pneumophilia, is the most common causative agent in human legionella infections, and is regarded to be the most virulent, accounting for approximately 90% of cases. The recognized mode of transmission is inhalation, and involves airborne transmission of water aerosols containing relatively high concentrations of the organism. Direct human-to-human transmission is not regarded to be a mechanism of infection.

A milder infection, also caused by Legionella bacteria species, is called Pontiac fever. The symptoms of Pontiac fever are similar to those of Legionnaires’ disease but closer to influenza and usually last for 2 to 5 days, and patients do not develop pneumonia.

The risk of legionella transmission to humans in a specific environmental setting is recognized to depend on a number of factors: conditions favorable for amplification of the organism (temperature, and physical and chemical characteristics of the water media); mechanism of dissemination (aerosolization of the water in which the organism has proliferated); the inoculation of the human in a manner by which the organism can cause infection (inhalation or aspiration of suitably sized droplets); the virulence of the bacterial strain; and the host’s susceptibility to infection (the elderly, smokers, individuals with chronic lung disease, and Immunocompromised/immunosuppressed being particularly at-risk).

Amplification is the term most often used to describe the substantial increase in the concentration of organisms. Conditions most often associated with amplification of legionella include favorable water temperatures (generally in the range of 77-115°F), stagnation, scale, sediment, biofilms, and presence of free-living amoeba. Legionella can infect and multiply within several species of amoeba and this may be a significant factor in amplification as well as transmission. Amoebae may also facilitate movement and colonization of domestic and industrial water systems. This temperature range should be considered important to public water suppliers. Temperatures up to 90°F have been reported in summer, in the upper levels of a thermally stratified water storage tank.

Aerosolization has been shown in a number of outbreaks to be a critical mechanism in transmission and associated with a number of devices including showers and sinks, whirlpool spas, humidifiers and other respiratory care devices such as nebulizers, cooling towers, evaporative condensers, decorative fountains, and in at least one case a grocery store produce mister.

A number of disease-risk issues relate directly to the built-environment and therefore have the potential to be influenced by engineering design and by operation and maintenance practices: amplification, the mechanisms of aerosolization, and transmission. There is a growing consensus that the focus of action should be on acting preemptively to evaluate buildings with an eye towards...
minimizing risk. Design, operation and maintenance steps should focus on at as many locations in a building as possible, in order to create a series of control mechanisms to prevent disease organism proliferation and transmission.

Anyone familiar with press reports regarding the New York City outbreak will note the emphasis on cooling towers as potential sources and sampling and cleaning/disinfection as mitigation. This emphasis is certainly an appropriate response to what is clearly an outbreak of significance, as well the epidemiological findings in this specific outbreak. However, from the standpoint of approaching preemptive control of growth, it is necessary to recognize that other potential sources in large buildings must be considered—particularly domestic hot water recirculation systems. Many such systems are designed to circulate hot water at non-scalding temperatures which often means that all or portions of these systems operate within the ideal breeding temperature for legionella of between 77 and 115° F.

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Guideline 12-2000, Minimizing the Risk of Legionellosis Associated with Building Water Systems has been frequently cited as authoritative by expert panels in investigations of legionella outbreaks, and as representative of current best-thinking on the subject of water system control measures. The Guideline points out that legionella samples alone may not be predictive of risk of transmission, for a number of reasons. Presence alone of an organism cannot be equated to a risk of infection; however (as in the case of the NYC outbreak) when case incidence is coupled with significant analytical results, this supports the need for short and long term control measures and recommendations for sound maintenance procedures. While studies indicate that quantitation (the number of Colony Forming Units per mL, or CFU/mL) alone does not correlate with incidence of disease, on the other hand risk for Legionella infections increase as the extent of colonization with L. pneumophila increases (i.e., when a high percentage of water outlets yield Legionella).

ASHRAE’s New Standard 188, Legionellosis: Risk Management for Building Water Systems, was finalized in June of 2015. The purpose of this standard “is to establish minimum Legionellosis risk management requirements for building water systems.” A building should be surveyed to determine whether certain fixtures or environmental systems use water are found to exist. For such buildings development of Water Management Program would be needed to comply with this Standard. From this, a plan of control measures and management can be developed and implemented.

Regardless of the selection of control measures, one general guidance applies to all control measures: validate, verify, document. The initiation of any control measures must be an adequately monitored and documented process in order to have any reasonable assurance of success and to permit these measures to be revisited at appropriate times for reevaluation. Accurate temperature readings chemical measurements and usage, and a long-term record keeping commitment are critical to this process. Temperature gauges should be periodically calibrated to ensure accuracy.

The development of a Management Plan should include a study of options available in order to more thoroughly understand advantages and disadvantages of specific control applications to the overall operational environment. Plumbing modifications, if any, must, of course, conform to State and local plumbing requirements. ASHRAE Standard 188 advises a building owner developing a Risk Management Plan to utilize a team with skills in engineering, health, safety, building services, hydraulics and microbiology. The Standard also directs designers to provide the necessary documentation to accompany and help the building owner to formulate the Plan development and the necessary analysis of hazards, control measures, and verification and validation of these measures.

**The fundamental issue for public water suppliers:**

From the standpoint of current EPA regulations, a public water supplier is in compliance with respect to legionella if its source water treatment conforms to relevant portions of the filtration requirements of the Surface Water Treatment Rule and the Groundwater Rule. However, legionella growth and proliferation largely relates to issues of regrowth in water distribution systems and mechanisms of amplification, which also includes biofilm development.

Ultimately legionella is representative of a new world for water suppliers—“new” waterborne diseases, many targeting the growing, high-risk segment of the elderly and immunocompromised/immunosuppressed. Risks that are dramatically increased by growth and biofilm development which occur within the premises of the customer. Finally, diseases such as legionella which are transmitted not by consuming water for drinking, but by inhalation of mists.

In time, the water supplier will find it necessary to deal with the public, the press, and building owners as they address issues relating to water quality changes occurring in premises piping. Public water suppliers are doing their part in addressing these issues—lending their knowledge and cooperating in several ongoing related projects of the Water Research Foundation.

EPA has reported that it is considering legionella as an analyte for the fourth round of Unregulated Contaminant Monitoring (UCMR4) scheduled for 2018-2020. EPA is leading a multi-agency taskforce discussing effectiveness of legionella treatment and control, and addressing policy issues for considering regulatory control over “consecutive systems” that may be providing supplemental treatment within a building or building complex. A document addressing these issues is expected sometime this year.
The New Slimmer
USABlueBook®
is still BIG
on Selection!

Don’t let the smaller footprint fool you! USABlueBook’s new catalog uses an environmentally friendly paper that slims down our book—but not our selection. USABlueBook still offers everything you need for water and wastewater operations and maintenance!

28 PRODUCT CATEGORIES

- Aeration
- Chart & Data Recorders
- Chemical Feed
- Collection Systems
- Electrical
- Flow Metering
- Gauges
- Hose
- Hydrants
- Lab Chemicals
- Lab Equipment & Supplies
- Lab Testing
- Level & Pressure
- Locating & Leak Detection
- Maintenance
- Office Products
- Pipe
- Plugs
- Process Analyzers
- Pumps
- Reference
- Safety
- Sampling Equipment
- Tanks
- Tools
- Valves
- Water/Wastewater Treatment
- Workwear

GREEN IS THE NEW BLUE!

Printing on environmentally friendly, 100% recyclable paper is only part of the story. By reusing shipping boxes, using responsible mailing practices and offering FREE electronic billing services, USABlueBook is doing its part to help protect the environment.

Over 64,000 Products • Personal Customer Service
Expert Technical Support • Nationwide Distribution Network
100% Satisfaction Guarantee!

Request your FREE catalog today! Call 800-548-1234 or visit www.usabluebook.com