Connecticut Section of the American Water Works Association
ANNUAL TECHNICAL CONFERENCE AND VENDOR EXPOSITION
ATCAVE 2016
PLANNING FOR CONNECTICUT'S WATER SUPPLY FUTURE

Tuesday, February 23, 2016
Radisson - Cromwell, 100 Berlin Road, Cromwell, Connecticut
Same Location as 2015– New Name!!

Get the most out of ATCAVE 2016 by earning Training Contact Hours (TCH) toward your Connecticut Treatment and Distribution System Operator Certification. Select from tracks in Water Quality and Treatment, Distribution and Storage, or Management.

ATCAVE Vendor Expo
8:00 AM – 3:00 PM
Location: Grand Ballroom

Join us for coffee/pastries and visit the vendor expo before the morning technical sessions begin.
The 2016 Vendor Expo is your chance to see the latest in water supply related technologies and equipment from among dozens of vendors and specialists in the water supply industry. For many attendees, the knowledge gained and the contacts made at the Vendor Expo add significant value to their attendance at ATCAVE.

SESSION A-1: WATER QUALITY AND TREATMENT
2.0 TCH* (.20 CEU)
8:30 a.m. to 10:30a.m.

Bedrock Well Rehabilitation
Stacy Stieber, CPG, Leggette, Brashears & Graham, Inc.
Thomas P. Cusack, CPG, Leggette Brachears & Graham, Inc.

This presentation will discuss how to identify when a bedrock supply well is in need of rehabilitation based upon changes in well yield, water level and/or water quality. Several methods for bedrock well redevelopment and rehabilitation will be discussed.

Algae and Algal Toxins: Impacts on Treatment and Control Strategies
Christine Thornton, Hazen and Sawyer

Algal blooms cause both physical and chemical treatability issues. This presentation will report on results from a study of six water treatment plants. All selected utilities are located in the eastern US, all have experienced algae related issues, and the utilities utilize a range of raw water sources.

Connecticut Department of Public Health: Upcoming Requirements of the Revised Total Coliform Rule (RTCR)
Vicky Carrier, DPH Drinking Water Section, Sanitary Engineer 3

SECTION B-1: DISTRIBUTION AND STORAGE
2 T.C.H.* (.2 CEU)
9:00 a.m. to 11:00 a.m.

Lake Konomoc Pump Station: Adding Redundancy and Resiliency to the City of New London's Existing Water Treatment Plant
James Collins, P.E., Project Manager, ARCADIS U.S., Inc.
Joe Lanzafame, City of New London

Future population growth and potential drought conditions had motivated the City of New London to proactively take steps to build redundancy and resiliency in its system by increasing its withdrawal capacity from its Lake Konomoc reservoir. This presentation will include an overview of the project, pump station design, challenges, and lessons learned.

Comprehensive Leak Inventory – An Innovative and Efficient Approach in San Marcos, Texas
Wayne Pratt, Vice President, Wachs Water Services

With an eye toward reducing non-revenue water, improving system mapping, and identifying system deficiencies, the City of San Marcos, Texas has commissioned a comprehensive leak inventory. Learn how San Marcos is delivering on its leak inventory goals and optimizing its approach to leak detection and data with the help of mobile GIS.

Mixed Oxidants – An Efficient Approach to Improving Water Quality & Chlorine Residual Issues
John Deogracias, Parkson Corporation

At Westover Air Reserve Base (WARB) in Chicopee, MA it was realized that typical methods for maintaining required chlorine residual levels such as flushing was not operationally cost efficient. Mixed oxidant chemistry has provided more than just enhanced chlorine residuals at the base. It has also significantly improved water quality overall. Learn about the onsite generation process, mixed oxidant chemistry and how it has saved the WARB over $100,000 per year.

SESSION C-1: MANAGEMENT
2 TCH* (.2 CEU)
9:00 a.m. to 11:00 a.m.

Connecticut Department of Public Health: Hot Topics and Initiatives
Lori Mathieu, DPH Section Chief, Drinking Water Section

Unaccounted for Water from Beginning to End
Tiffany Lufkin, PE, Asset Management Engineer, South Central Connecticut Regional Water Authority
Brian Messner, EIT, Lead Project Engineer, Wright-Pierce

The South Central Connecticut Regional Water Authority (SCCRWA) has recently reinvigorated its unaccounted for water efforts beginning at the SCCRWA's two largest water treatment facilities. This presentation will detail their approach to controlling unaccounted for water, including effluent flow meter testing method and results. Lessons learned will also be presented.

Improving Efficiency with Electronic O&M Manual and Operator Logs
Tom Tyler, The Metropolitan District
Len Sekuler, Arcadis

Hartford's Metropolitan District Commission Water Pollution Control Facility recently created electronic operation and maintenance (O&M) manuals for a number of treatment processes. Background information including drawings, O&M manuals, vendor information, standard operating procedures, as well as, operator logs and training are all included in an easily accessible electronic system. Advantages include better use of existing information, confidence in latest revision dates, and access from computers and mobile devices.

ATCAVE LUNCHEON
11:30 a.m. – 1:30 p.m.
Between the morning and afternoon technical sessions, tour the Vendor Expo, participate in the Vendor Booth Raffles (new this year) and enjoy the ATCAVE Luncheon Buffet.

SESSION A-2: WATER QUALITY AND TREATMENT
2 TCH* (.2 CEU)
1:00 p.m. to 3:00 p.m.

Optimizing a Green Sand Filtration System for Iron/Manganese Removal and Water Main Ice Pigging at the North Willington Village Condominium Association Water System
Irving Fallon, PE, Contract Operator, North Willington Village Condo Association

The North Willington Village Condominium Association's water system has a history of difficult water. This presentation discusses how several challenges at this small system have been addressed.

Mind the Gap: Upgrading Existing Overflow Piping to Meet Standards
Brian P. Robillard, PE, Tata & Howard
Jim Hill, South Central Regional Water Authority

Many utilities are being cited for lack of air gaps on tank overflow and filter to waste piping. This presentation will present two projects and the challenges associated with this type of upgrade.

Seeing It All the Way Through: Adding DAF and A Lot More to Meriden's Broad Brook Water Filtration Plant
Dennis Waz, Director of Public Utilities, City of Meriden
Chuck Pike, PE, Engineering Manager, Black & Veatch
Ari Copeland, Plant Operations/Startup Specialist, Black and Veatch

The City of Meriden is upgrading their Broad Brook WFP to include dissolved air flotation. This presentation provides an overview of the project from planning and design, through to construction; including "lessons learned" at each phase.

Section B-2: Distribution and Storage
2 TCH* (.2 CEU)
1:30 p.m. to 3:30 p.m.

Connecticut Department of Public Health: DPH Regulatory Update, Focus on Lead & Copper Rule and the Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
Christopher Roy, DPH Drinking Water Section, Supervising Sanitary Engineer

Responding to Reoccurring Coliform Detections
Kristen Berger, P.E., Principal

Reoccurring total coliform detections can be a troublesome issue for public water suppliers. To respond to this issue, questions need to be considered. These include what is the source of the bacteria and where are susceptible areas of the distribution system? This presentation will summarize an evaluation completed for South Kingstown, Rhode Island's South Shore Water in response to repeat coliform hits in their distribution system.

Not Your Average Pump Station Upgrades Project: Meeting Challenges to Achieve Reliability
Darleen P. Buttrick, Tighe& Bond
Rose Gavrilovic, South Central Connecticut Regional Water Authority (SCCRWA)

Recent upgrades have been completed at SCCRWA's Lake Saltonstall raw water pump station. Upgrades include the installation of self-cleaning drum screens with airburst, new motors and VFDs for raw water pumps, as well as electrical and structural upgrades at both the pump station and the water treatment plant. This presentation will review the balance between the project scope and budget, design alternatives, and overall project challenges.

SECTION C-2: MANAGEMENT
2 TCH* (.2 CEU)
1:30 p.m. to 3:30 p.m.

Protecting Against ARC Flash Hazards
Joe Hurley, Woodard & Curran
Andrew Fitzpatrick, PE, Woodard & Curran

This presentation details the requirements for arc flash risk assessments and how these assessments can identify potential risks. Information shared includes safety related work practices, arc flash boundary, and appropriate personnel protective equipment to be used within the arc flash boundary. These assessments identify practical improvements that improve personnel protection and considerations for liability associated with incidents.

Risk and Resilience Management of Water and Wastewater Systems
Kate Novick, Gradient Planning

Find out more about the Risk Analysis and Management for Critical Asset Protection Standard for the water sector. This Standard can be used to provide support for internal decisions about critical assets and their management, and improve reliability of service.

A Well-Seasoned Case Study: Investigation and Modeling of Road Salt in Groundwater
Kevin Schwabe, Avon Water Company
Andy Adinolfi, GEI Consultants, Inc.

This presentation describes the investigation of potential sources of increased sodium in a water supply aquifer. Investigation of nearby road salting practices, monitoring well sampling, geochemical analysis

and groundwater modeling were completed to determine the likely source and timeframe of the increased sodium.

* At the time of publication, DPH Training Contact Hour Applications for technical sessions were pending.

ATCAVE Throughout the Day

VENDOR EXPO
8:00 AM – 3:00 PM
Location: Grand Ballroom
FREE ADMISSION

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PRODUCT DEMONSTRATIONS
Product demonstrations are held throughout the day. Please consult the information board near registration to find demonstration listings, locations and times.

FRESH IDEAS POSTER CONTEST
The CTAWWA Young Professionals Committee hosts the "Fresh Ideas" Poster Contest. The goal of this competition is to encourage new member involvement in the CTAWWA and to expose our new members to the opportunities that their membership in AWWA offers them.

The CTAWWA Fresh Ideas Poster Contest winner is eligible to compete at AWWA's 2016 Annual Technical Conference (ACE16). ACE16 will be held June 19 – 22 in Chicago, IL. CTAWWA awards our Fresh Ideas winner a stipend toward travel and accommodations at ACE16.

Individuals new to the water supply profession are encouraged to enter. Topics presented through Fresh Ideas at ATCAVE in the past have ranged from methods to monitor, model, and remove microbes and contaminants to treatment plant design. The Connecticut Section Fresh Ideas contest will be a poster session located in the main hallway near the end of the Expo.

DPH POSTER CONTEST
The DPH Drinking Water Section will display student poster contest entries throughout the day. Please visit the contest and vote!