

ATCAVE 2010: Connecticut's Top Water Supply Information & Resource Exchange

Annual Technical Conference and Vendor Expo Connecticut Section – American Water Works Association

February 23, 2010, at the Crowne Plaza, Cromwell, Exit 21 on I-91

Get the most out of ATCAVE 2010 and earn educational credits! There are eight informative sessions to choose from. There are expanded break times to visit vendors. Please see the training registration form at the end of this section to sign up.

Notes: Sessions A and B are geared to Treatment; Sessions C & D are geared to Distribution, Sessions E, F, G, H, I and J are both Treatment and Distribution.

Cost of Sessions:

You can attend a morning and afternoon session. The fee for attendance is \$100.00 per person which includes a morning session, afternoon session, course materials and lunch. Sessions G and H are free to small system operators and local health officials through a program with the Connecticut Department of Public Health and EPA; all others are welcome to attend those sessions at the \$100 rate.

Section A: Water Quality and Treatment

2.5 T.C.H.* (.25 CEU)

8:30 AM to 11:00 AM

Price: \$75.00 includes course materials and Expo lunch

The Limnology and Management of Surface Source Water systems

*Robert W. Kortman, Ph.D.,
Ecosystem Consulting Services, Inc.*

Topical Aspects to be presented: Water Supply Limnology, such as, Physical, Chemical, and Biological Reservoir Characteristics important for Water Supply. Source Water Quality Management Approaches, and Case Studies.

Filtration Removals of Copepods and Rotifers through Mono-Media Sand and Dual Media Granular Filters

William Clunie, AECOM Water; Susan Negrelli, P.E., Assistant Manager of Water Treatment – The Metropolitan District; Peter J. Grabowski, P.E., Vice President – Tighe & Bond, Inc.

This presentation presents the results and conclusions of a pilot study and provides a summary of the techniques that can be used to help control copepods and rotifers from entering the finished water.

Cost/Benefit Analysis of Management Alternatives for Rotifers and Copepods at Water Treatment Facilities

William J. Kennedy, P.E., Manager of Water Treatment – The Metropolitan District; Susan Negrelli, P.E., Assistant Manager of Water Treatment – The Metropolitan District; Peter J. Grabowski, P.E., Vice President – Tighe & Bond, Inc.

Studies conducted by the Metropolitan District have identified numerous alternatives to manage and control Rotifer and Copepod organisms at water treatment facilities. This presentation will focus on the following: Advantages and disadvantages of the management alternatives, Equipment implementation considerations, and conceptual costs associated with the management alternatives, including operation and maintenance of equipment.

Section B: Water Quality and Treatment

2 T.C.H.* (.2 CEU)

1:00 PM to 3:00 PM

Price: \$75.00 includes course materials and Expo lunch

Legend Hill Condominium Complex Uranium Treatment System

Rose M. Gavrilovic, P.E., Senior Engineer – Geolnsight, Inc., Matt Stosse, Special Projects Manager – Connecticut Water Company

This presentation will discuss the process of designing, permitting and installing a uranium treatment system at the Legend Hill Condominium complex, located in Madison, CT. This system not only provided treatment to the Legend Hill water supply, but also provided a solution to the uranium issues at the adjacent Madison School System through a connection to the Legend Hill distribution system.

Organics Removal Using the Magnetic Ion Exchange Process

Chris Silke, - Wright-Pierce

This presentation provides attendees with an understanding of the MIEX process for removing organic material, the precursor to disinfection byproducts. In particular, this presentation will discuss piloting results, design details, construction insight and real life results. The discussions will also present the pros and cons of the MIEX process (e.g. treatment application nuances, operational limitations, waste stream handling, residuals management, permitting, etc.).

Construction Challenges – Operating a Water Treatment Facility During a Major Renovation Project

Robert J. Dusza, Jr., Project & Technical Support Manager – Manchester Water and Sewer Department; Darleen P. Buttrick, P.E., Project Engineer – Tighe & Bond, Inc., Peter J. Grabowski, P.E., Vice President – Tighe & Bond, Inc.

This presentation highlights some of the major challenges during construction, and the careful coordination and planning required between the contractor, engineer, and owner to keep a Water Treatment facility in operation throughout a construction/renovation project.

Section C: Distribution Operations

2 T.C.H.* (.2 CEU)

9:00 AM to 11:00 AM

Price: \$75.00 includes course materials and Expo lunch

Suitability of Trenchless Technologies for Water Main Projects

Tim Stinson, P.E., SEA Consultants, Inc.

This presentation will provide an overview of the different trenchless technologies that may be considered for water main projects, evaluate their suitability for various applications, and discuss the types of site and project conditions that may drive the decision process for selecting a trenchless process over traditional construction methods. The discussion will include brief case studies and field examples for illustration purposes.

The RWA I-95/I-91 36-inch Crossing: Threading Through the Needle of New England Gateway

Matthew Francis, P.E., Geo-engineering & Construction Lead – URS Salt Lake City, UT

This is a case history of a large diameter water main crossing through a highly complex urban interstate interchange required for construction of the new Bridge ("Q" Bridge) in New Haven, CT. This project signaled a need for safe innovation to replace an existing 36-in water main obstructing planned bridge foundations. The challenge included developing an alignment to navigate complex subsurface obstructions, maintaining service of the existing site infrastructure, completing the work on a compressed schedule, and accommodating unfavorable ground conditions. Each challenge is described with its associated solution and contribution to the successful completion on schedule.

"Fast-Track Water Storage Tank Construction: Regional Water Authority Expedites Tank Replacement in Lieu of Repairs"

Brian Robillard, P.E., Project Engineer – South Central Connecticut Regional Water Authority; Christopher Hodgson, New England Regional Manager – Natgun Corporation

This presentation will feature a discussion of the events leading up to the decision to replace the tank, and key elements of the factors considered. The program will also include a sequence of construction from demolition, to site preparation, to tank construction, to project completion.

Section D: Distribution Operations

2 T.C.H.* (.2 CEU)

1:30 PM to 3:30 PM

Price: \$75.00 includes course materials and Expo lunch

The University of Hartford Engineers Without Borders (EWB) Student Chapter and the Hartford EWB Professional Chapter Partnering With the Residents of Abheypur, India to Provide Easier Access to Clean Water

David Pines, Ph.D., Associate Professor & Chair, Department of Civil, Environmental & Biomedical Engineering, College of Engineering, Technology & Architecture – University of Hartford; Participating students and presenters: Clay Pipkin, Neftali Torres, and Amy Waraksa are engineering students at the University of Hartford and members of the EWB student chapter.

The University of Hartford's Engineers Without Borders (EWB) Student Chapter has been working for the past 3 years with the villagers of Abheypur, India to provide easier access to clean water. Projects to date have included drilling a well, installing a solar-powered groundwater pump, laying 800 feet of pipeline, constructing a roof-top rainwater harvesting system, and constructing water storage systems. The primary challenges we are currently addressing are the sustainability of the groundwater supply due to increase water demand from farmers and development of a water management plan so that the systems constructed can be maintained.

GIS Technology at Work – Making Life Easier in the Field and Office

Robert Page, Supervisor of GIS & Records Management – Aquarion Water Company; Mark Fois, Senior Engineer – Aquarion Water Company; Erik M. Bernard, Manager Water Resource and Infrastructure Planning – Aquarion Water Company

The presentation discusses the Aquarion Water Company GIS mapping system as a web-based tool for desktop use and as a mobile application that utility workers can access on rugged laptop computers and use to update mapping records and provide real time data in the field.

Disposal of Excess Trench Materials – One Bad Apple Spoils the Spoils

Chris Wester, Vice President/Regional Manager – Weston & Sampson

Disposal of excess excavation materials can open the door to costly liability for your utility. Regulations can be subject to interpretation, which can leave you questioning how you should handle your spoils. Many utilities and contractors question whether the excavated materials can be reused on site, shipped offsite as fill or borrow, or whether they have to be sent to a regulated facility. Confusion and mistakes can result in costly change orders and legal battles. This presentation will explain the regulations, and give you an understanding of not only their language, but also their intent, helping you to decide on the best approach for disposal of soils from your project.

Section E: Management

2 T.C.H.* (.2 CEU)

8:30 AM to 10:30 AM

Price: \$75.00 includes course materials and Expo lunch

The Truth About Energy Efficiency – Recognizing Appropriate (and Inappropriate) VFD Applications is Critical to Efficient Water System Operations

David Bouffard, P.E., CEM – Woodard & Curran

Energy efficiency is an important topic for water utilities today. Efficiency improvements can reduce energy usage, save money, streamline operations and minimize maintenance requirements. VFDs can be a significant efficiency improvement under the proper conditions however, they are often applied incorrectly when system hydraulics are not appropriate. The presentation will cover case studies describing when water system hydraulics are appropriate for VFDs and scenarios when VFDs are not appropriate.

The Truth About Your Power Bill

Jen Muir, JK Muir, LLC, Energy Efficiency & Environmental Engineering Water – Wastewater

This presentation includes an overview of the energy market in New England, how electrical rates are established, and the impacts of the deregulated market, congestion, and location on electrical costs. Example energy bills will be reviewed along with a discussion of the typical charges and rate structures. Strategies will be presented for evaluating energy bills, calculating the cost impacts of time of use rates, demand charges, and power factor billing, and identifying cost saving opportunities.

Prioritization of Pipeline Replacements at Aquarion Water Company
Erik M. Bernard, Manager Water Resource and Infrastructure Planning - Aquarion Water Company; Peter Galant, P.E., Tighe & Bond, Inc.
This presentation discusses the various models and tools that Aquarion Water Company uses to identify the proper level of investment in pipeline replacements and the specific pipes to replace.

Minimum Requirements to Apply For DWSRF and ARRA (Stimulus) Update

Cameron Walden, DPH Supervising Sanitary Engineer

This presentation focuses on minimum requirements to apply for a loan under the Drinking Water Section Revolving Fund (DWSRF) and also

provide an update on the use of the American Reinvestment and Recover Act (ARRA-stimulus) funds. A preview of what to expect in the coming year will also be included. The target audience is medium to large public water systems.

Section F: Management

2 T.C.H.* (.2 CEU)

1:00 PM to 3:00 AM

Price: \$75.00 includes course materials and Expo lunch

Crisis Communications: Surviving & Thriving in Difficult Times

Andrea Obston, Marketing Consulting, LLC

This presentation discusses preparing your organization before disaster hits – A Do-It-Yourself Crisis Communications Presentation/Workshop. You'll learn the components that make up an actionable plan; hear about spotting communications disasters early and often; selecting a crisis team; creating and delivering the right message to your employees.

Arc Flash Potential – Is this a concern at your water treatment facility?

Peter A. Wozniak, P.E., Senior Electrical Engineer – Tighe & Bond, Inc.; Peter J. Grabowski, P.E., Vice President – Tighe & Bond, Inc.

This presentation will include the following: Description of an arc flash and procedures for conducting an arc flash hazard analysis, factors that affect the arc flash calculations, techniques to reduce arc flash energy to improve safety, and safety practices for inspection and working on energized equipment.

Novel Concepts in Water Well Rehabilitation: Addressing Iron Bacterial Issues

Neil Mansuy, Vice President of Technical Services - Subsurface Technologies Inc

Novel ideas and understanding about well problems and solutions will be presented. Some of these include the cause of shorter timeframe between rehabilitation intervals as wells age. Well hydraulics, lost capacity problems, associated water quality problems, and understanding ground water microbiology will be discussed.

Preface to Connecticut Department of Public Health Training

This year's program in the Department of Public Health Training tracks will focus on the Groundwater Rule and other important reminders for staying in compliance now and in the future. Sessions D1, D2, E1 and E2 are valid for Training Contact Hours (TCH) for all types of operator licenses (treatment, distribution or small system). Maximize the use of your time and earn contact hours concurrently for multiple operator licenses if you are so licensed. These programs come with admission at the 2010 Vendor Expo- this is your chance to see the latest in water related technology. Please visit the DPH booth where we will be providing information on the Drinking Water State Revolving Loan Fund.

Note: This program can be applied toward the minimum of 10 hours of approved training required to maintain status as a Certified Water System Operator

Section G: Connecticut Department of Public Health Program for All Operators, Local Health Officials

3 T.C.H. (.3 CEU)

8:30 AM – noon

Price: Free for Small System Operators, local health officials; others \$75.00 – includes course materials and Expo lunch

In this session (valid for all operator license types), you will hear about the Groundwater Rule, Water Quality Trends in 2009 for Connecticut Public Water Systems and other Important Regulatory Reminders. Don't miss this opportunity to learn about Significant Deficiencies, Contact Time, and Treatment Options under the Groundwater Rule which will affect over 90% of Public Water Systems in Connecticut.

Section H: Connecticut Department of Public Health Program for All Operators, Local Health Officials

2.5 T.C.H. (.25 CEU)

1:30 PM – 4:15 PM

Price: Free for Small System Operators, local health officials; others \$75.00 – includes course materials and Expo lunch

This session (valid for all operator license types) will focus on new Legislation, Safe Yield, the Drinking Water State Revolving Loan Fund and Stimulus, Treatment Plant Optimization, the Importance of Communication between Local Health and Utility Officials and other important topics. We hope that water utility managers can attend this session so important information can be shared.

Section I: Connecticut Department of Public Health Program for All Operators, Local Health Officials

3.5 T.C.H. (.35 CEU)

8:30 AM – 12:15 PM

Price: Free for Small System Operators, local health officials; others \$75.00 – includes course materials and Expo lunch

Back by popular demand! This session (also valid for all operator license types) includes a presentation about the basics of well drilling, down hole camera inspections of wells and well repairs. A segment on geothermal wells is included. Legislative updates, the importance of communication between local health and utility officials and other important information will also be covered.

Session J: Connecticut Department of Public Health Program for All Operators, Local Health Officials 2 Operator T.C.H.* (.2 CEU), Also Contact Hour Approval Pending for Food Inspector Recertification

1:30 PM to 3:45 PM

Price: Free for Small System Operators, local health officials; others \$75.00 – includes course materials and Expo lunch

This session provides the opportunity for training contact hours for both operators (all license types) and food inspectors. We are covering the basics of groundwater treatment, information about total coliform and E.Coli bacteria in water at food service establishments and other useful information.

Vendor Expo

9:30 AM – 4:00 PM

Location: Grand Ballroom

The 2008 Vendor Expo is your chance to see the latest in techniques and equipment from dozens of vendors and specialists to the drinking water industry. For many attendees, the knowledge gained and the contacts made at the vendor expo make attendance at ATCAVE extra valuable. Free Admission.

Product Demonstrations

Product demonstrations are held throughout the day.

General Expo Luncheon

11:30 AM – 1:30 PM

Individual tickets available for \$25.00

(Please note that all programs are subject to change)

**Application for T.C.H credit is pending*



ATCAVE Technical Training Registration Form

Annual Technical Conference and Vendor Expo, Connecticut Section—AWWA
February 23, 2010, Crowne Plaza, Cromwell, CT

Name:	Phone:	
Street Address:		
City:	ST:	ZIP:
Company / Organization:		
Email address:		

Instructions:

- 1) Fill out upper selection, including company name / organization, phone number and email address.
- 2) Select desired sessions. Please be sure to check ALL boxes for each selection.
- 3) Complete the payment section on the second page of the registration form.
- 4) Return to address listed on the second page with appropriate payment.

CTAWWA Offerings: Lunch is included. Select a morning and an afternoon session and pay only \$100.00 for both (including lunch)

Section	Topics	CEUs	Time	Price	Select
Water Quality and Treatment Program					
A	<ul style="list-style-type: none"> • The Limnology and Management of Surface Source Water systems • Filtration Removals of Copepods and Rotifers through Mono-Media Sand and Dual Media Granular Filters • Cost/Benefit Analysis of Management Alternatives for Rotifers and Copepods 	.25	8:30 am to 11:00 am	\$75.00	<input type="checkbox"/>
B	<ul style="list-style-type: none"> • Legend Hill Condominium Uranium Treatment System • Organics Removal Using the Magnetic Ion Exchange Process • Construction Challenges – Operating a Water Treatment Facility During a Major Renovation Project 	.2	1:00 pm to 3:00 pm	\$75.00	<input type="checkbox"/>
Distribution Operations Program					
C	<ul style="list-style-type: none"> • Suitability of Trenchless Technologies for Water Main Projects • The I-95/I-91 36-inch Crossing: Threading the Needle of the New England Gateway • Fast-Track Water Storage Tank Construction 	.2	9:00 am to 11:00 am	\$75.00	<input type="checkbox"/>
D	<ul style="list-style-type: none"> • Engineers Without Borders (EWB) – Abheypur, India Clean Water Project • GIS Technology at Work – Making Life Easier in the Field and Office • Disposal of Excess Trench Materials – One Bad Apple Spoils the Spoils 	.2	1:30 pm to 3:30 pm	\$75.00	<input type="checkbox"/>
Management Program					
E	<ul style="list-style-type: none"> • The Truth About Energy Efficiency • The Truth About Your Power Bill • Prioritization of Pipeline Replacements at Aquarion Water Company • Minimum Requirements to Apply for DWSRF and ARRA (Stimulus) Update 	.2	8:30 am to 10:30 am	\$75.00	<input type="checkbox"/>
F	<ul style="list-style-type: none"> • Crisis Communications: Surviving & Thriving in Difficult Times • Arc Flash Potential – Is This a Concern at Your Facility? • Novel Concepts in Water Well Rehabilitation: Addressing Iron Bacterial Issues 	.2	1:00 pm to 3:00 pm	\$75.00	<input type="checkbox"/>
Registration Note: If you selected a morning and an afternoon session, the total cost is only \$100. This can be combined with CT Department of Public Health program offerings.			Subtotal: \$		

For additional course offerings, including CT Department of Public Health, see reverse side of Registration Form

ATCAVE Technical Training Registration Form - Continued

CT Department of Public Health: Lunch is included. Free to all small systems operators, local health directors and food inspectors.

Section	Topics	CEUs	Time	Check One	Price	Selection
DPH Program for ALL Operators						
G	In this session (valid for all operator license types), you will hear about the Groundwater Rule, Water Quality Trends in 2009 for Connecticut Public Water Systems and other important Regulatory Reminders	.3	8:00 am to 11:45 am	<input type="checkbox"/> Small System <input type="checkbox"/> Health Director <input type="checkbox"/> Food Inspector	\$ 0.00	<input type="checkbox"/>
				<input type="checkbox"/> Other	\$75.00	<input type="checkbox"/>
H	This session (valid for all operator license types), will focus on new Legislation, Safe Yield, the Drinking Water State Revolving Loan Fund and Stimulus, Treatment Plant Optimization, the Importance of Communication between Local Health and Utility Officials and other important topics.	.25	1:30 pm to 4:15 pm	<input type="checkbox"/> Small System <input type="checkbox"/> Health Director <input type="checkbox"/> Food Inspector	\$ 0.00	<input type="checkbox"/>
				<input type="checkbox"/> Other	\$75.00	<input type="checkbox"/>
DPH Program for Operators, Local Health Directors and Food Inspectors						
I	Back by popular demand! This session (valid for all operator license types) includes a presentation about the basics of well drilling, down hole camera inspections of wells and well repairs. A segment on geothermal wells is included. Legislative updates, will also be covered	.35	9:00 am to 11:45 am	<input type="checkbox"/> Small System <input type="checkbox"/> Health Director <input type="checkbox"/> Food Inspector	\$ 0.00	<input type="checkbox"/>
				<input type="checkbox"/> Other	\$75.00	<input type="checkbox"/>
J	This session provides the opportunity for training contact hours for both operators (all license types) and food inspectors. This session will cover the basics of groundwater treatments, information about total coliform and E.Coli bacteria in water at food service establishments and other useful information.	.2 <small>See note 1</small>	8:00 am to 11:45 am	<input type="checkbox"/> Small System <input type="checkbox"/> Health Director <input type="checkbox"/> Food Inspector	\$ 0.00	<input type="checkbox"/>
				<input type="checkbox"/> Other	\$75.00	<input type="checkbox"/>
				<input type="checkbox"/> Other	\$75.00	<input type="checkbox"/>
<small>CEU Note 1: Approval pending for contact hours for food inspector recertification</small>						
Registration Note: If you are not a small system, a local health director or a food inspector and you selected a morning and an afternoon session, the total cost is only \$100. This can be combined with CTAWWA offerings				Subtotal: \$		

LUNCH ONLY	Lunch in the Grand Ballroom Only <small>(for Vendor Show only or if you are attending non-educational events)</small>	Quantity: _____ @ \$25.00 ea	Total Lunch:	
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Please make checks payable to: CTAWWA and mail along with this form to:

CTAWWA - ATCAVE Registration
72 Rockland Avenue
Waterbury, CT 06708-4729

Total Fee enclosed:

Further information can be obtained by
calling (203) 757-1855 or
emailing: ctawwa@snet.net

Registrations can also be faxed to 203-725-0045

CREDIT CARD INFORMATION				
Type of Payment <input type="checkbox"/> Check (Payable to CTAWWA) <input type="checkbox"/> P.O.# _____ <input type="checkbox"/> MasterCard/Visa <input type="checkbox"/> AMEX <input type="checkbox"/> Discover				Amount (from TOTAL FEE above) \$
Credit Card #	Exp. Date	CCV #	Signature	
<small>Cancellation Policy: If you need to cancel, you must contact CTAWWA in writing at least two business days prior to the start of the course. If you contact CTAWWA within one business day, you will be charged 100% of the original course registration fee. This charge is non-refundable and non-transferable. Written refund/credit request made for special circumstances will be considered if received within two weeks from the start date of the program. Credit issues are valid for six months from the date of the program.</small>				

Check here if you have a disability and require accommodations to fully participate. You will be contacted by CTAWWA. For additional registrations, reproduce this form or call CTAWWA at (203) 757-1855.