

7th Annual Water Quality & Treatment Symposium

Connecticut's Best Drinking Water Taste Test



Tuesday, November 30, 2021 8:00am-3:30pm



556 Mulberry Street, Plantsville, CT 06479



7th Annual Water Quality & Treatment Symposium November 21, 2021 Agenda

8:00-8:45 **Registration**

8:45-9:25 Emerging Contaminants: What Potentially Lies Ahead for CT Water Suppliers

James Roberts, P.E. – Senior Vice President, H2M architects + engineers Joseph J. Todaro, P.E., LEED AP BD+C

Emerging contaminants, per- and polyfluoroalkyl substances (PFAS) in particular, have been dominating the landscape of drinking water regulatory compliance. Varying State regulatory limits have been enacted, most significantly below the Federal EPA lifetime health advisory limitations. We will discuss the challenges which are likely ahead for Connecticut and how they parallel lessons learned in neighboring jurisdictions, potential risks and planning concepts, and conclude with case studies informed by planning and treatment process needs and the potential impacts of multiple contaminants. Thoughtful planning is critical, as significant capital investment dollars are in the balance.

9:25 – 10:05 Retrofitting a Surface Water Treatment Plant for PFAS Removal in Braintree, MA

Stephen C. Olson, P.E., President, H2Olson Engineering, Inc.

PFAS is not only a groundwater issue, but has also been found in many surface water supplies in New England. In 2019, PFAS was found in the Great Pond Reservoir System which serves the three Massachusetts communities of Braintree, Randolph, and Holbrook. This presentation will review the design, full scale demonstration study, and retrofit of Braintree's 6.5 MGD surface Water Treatment Plant from mixed media filters to the use of GAC media for the removal of PFAS and while maintaining compliance with the Surface Water Treatment Rule.

10:05-10:25 **BREAK**

10:25-11:05 Responding to PFAS Contamination: Shifting Costs from Water Suppliers to Polluters.

Ashley Campbell, Attorney at SL Environmental Law Group, PC

Discover how Connecticut communities can cover the cost to clean up groundwater contamination from per- and poly-fluoroalkyl substances (PFAS), also known as the "forever chemical," using the legal system. This presentation will explore how PFAS harm water suppliers, the legal responsibility of chemical manufacturers when their products harm others, and how water suppliers can use the law to make PFAS manufacturers pay.

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11:05-11:45 Pilot Scale Study at West Parish Filter Plant: Pilot Scale Evaluation of Direct Filtration Alternatives and Dissolved Air Flotation with Gravity Media Filtration

Bryan Sadowski, EIT, AECOM

Elise Tarnauskas, Process Control Analyst, Springfield Water & Sewer Commission

The Springfield Water and Sewer Commission completed a water treatment pilot study at the West Parish Filters from October 2019 to November 2020. The study was initiated to address increasing concentrations of disinfection byproducts in their distribution system. The study investigated short term improvements to improve the existing direct filtration process by adding chlorine dioxide or altering the coagulant and a long term replacement, dissolved air flotation. This presentation highlights the study findings and impacts on future source water treatment

11:45-1:00 **LUNCH**

1:00-1:40 Controlling DBPs with Tank Mixing and

Vanessa Borkowski, P.E., Senior Civil Engineer, Stantec

A 2.4 MG Occum Tank standpipe within the Norwich Public Utilities drinking water distribution system experienced relatively high levels of disinfection byproduct prior to the installation of the aeration and mixing system in 2019. This presentation will discuss the Occum Tank standpipe prior to and after installation of the aeration and mixing system based on data collected at monitoring points throughout distribution system.

1:40-2:20 Multiple Treatment Strategies and Technologies for Maintaining DBP Compliance

Nick Rossi, P.E., Manager – Supply Operations Technical Services

This presentation will provide a glimpse into Aquarion's multi-pronged, multi-barrier approach to maintaining DBP compliance across 3,000 miles of water main in Connecticut. Coagulation fundaments and general treatment strategy will be discussed along with technologies for organics removal and DBP removal. Recent jar tests, pilots, and demonstrations at multiple treatment facilities demonstrate the variability and complexity of the balance between DBPs and other water quality goals.

2:20-2:45 **BREAK** – Connecticut's Best Water Taste Test Results

2:45-3:25 **Regulatory Update – CT DPH**

Pat Bisacky, Environmental Analyst 3, Connecticut Department of Public Health - Drinking Water Section, Source Assessment and Protection Unit.

This presentation will focus new and upcoming regulations and current drinking water quality challenges facing water utilities here in Connecticut. Topics such as regulated contaminants, disinfection by-products (DBP's), lead, harmful algal blooms, and non-regulated (emerging) contaminants such as PFAS and chloride will all be discussed.



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REGISTRATION INFORMATION

Compa	any or Organ	ization:				
Billing	Address:					
City: _			Sta	te:	Zip:	
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Phone	Number:			CT	AWWA Membe	er #:
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Please let us you kif you ha disability and may require special accommodations to participate.