



# 13<sup>th</sup> Annual U.S. EPA Drinking Water Workshop

## Small Drinking Water Systems: Challenges and Solutions

August 23-25, 2016 • Hyatt Regency Cincinnati • Cincinnati, OH

Sponsored by the U.S. Environmental Protection Agency (EPA)  
in cooperation with the Association of State Drinking Water Administrators (ASDWA)

### Agenda

(Last updated: August 12, 2016)

Tuesday, August 23, 2016			
7:45 am	<b>Registration</b> (Regency Ballroom Foyer – Third Floor)		
8:30 am	<a href="#">Regency ABC Ballroom</a> <b>Welcome and Introduction</b> <i>Cindy Sonich-Mullin, EPA's Office of Research and Development (EPA-ORD)</i> <i>Peter Grevatt, Ph.D., EPA's Office of Water (EPA-OW)</i>		
9:00 am – 12:00 pm	<b>Session 1: Opening Session</b> <i>Moderator: Jim Taft, ASDWA</i>		
9:00 am	<b>Keynote Address</b> Protecting our Drinking Water for the Future: A Systems Approach to Protect Public Health <i>Thomas Burke, Ph.D., EPA-ORD</i>		
9:30 am	Next Steps Being Taken on the Lead and Copper Rule (LCR) and the Future of the National Drinking Water Program <i>Peter Grevatt, Ph.D., EPA-OW</i>		
10:00 am	Break		
10:30 am	“The Sky is Falling” – How Colorado is Responding to Health Advisories for Water Systems that are Serving Perfluorinated Compounds (PFCs) <i>Tyson Ingels, Colorado Department of Public Health and Environment</i>		
11:00 am	National Toolkit for <i>Legionella</i> Control in Building Water Systems <i>Chris Edens, Ph.D., Centers for Disease Control and Prevention</i>		
11:30 am	Implementing the Revised Total Coliform Rule – Minnesota’s Approach for Noncommunity Systems <i>Chris O’Brien and Paul Felling, Minnesota Department of Health</i>		
12:00 pm	Lunch (on your own)		
1:30 pm – 3:00 pm	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <a href="#">Regency A</a>  <b>Session 2A – Distribution Systems I: Lead Challenges and Recommendations</b>  <i>Moderator: Jeffrey Kempic, EPA-OW</i> </td> <td style="width: 50%; vertical-align: top;"> <a href="#">Regency BC</a>  <b>Session 2B – Monitoring and Treatment I: Emerging Contaminants</b>  <i>Moderator: Greg Carroll, EPA-OW</i> </td> </tr> </table>	<a href="#">Regency A</a> <b>Session 2A – Distribution Systems I: Lead Challenges and Recommendations</b> <i>Moderator: Jeffrey Kempic, EPA-OW</i>	<a href="#">Regency BC</a> <b>Session 2B – Monitoring and Treatment I: Emerging Contaminants</b> <i>Moderator: Greg Carroll, EPA-OW</i>
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## Tuesday, August 23, 2016 (continued)

3:00 pm	Break	
3:30 pm – 5:00 pm	<a href="#">Regency A</a> <b>Session 3A – Distribution Systems II: Lead Service Lines</b> <i>Moderator: Victoria Banks, EPA-OW</i>	<a href="#">Regency BC</a> <b>Session 3B – Monitoring and Treatment II: Harmful Algal Blooms and Cyanotoxins</b> <i>Moderator: Michelle Latham, EPA-ORD</i>
3:30 pm	Making Lemonade: Addressing Lead and Copper Issues <i>Brandon Bowman, Oklahoma Department of Environmental Quality</i>	Algal Toxin Removal Capabilities of Common Treatment Processes <i>Nicholas Dugan, EPA-ORD</i>
4:00 pm	Incentivizing and Enhancing Lead Line Replacement <i>Jeff Swertfeger, Greater Cincinnati Water Works</i>	Support Tools to Reduce Cyanotoxin-Related Risks in Drinking Water <i>Ryan Albert, Ph.D., EPA-OW</i>
4:30 pm	Lead Service Line Replacement Program <i>Randall Roost, Lansing Board of Water and Light</i>	Source and Finished Water Monitoring Options and Their Limitations and Benefits <i>Heather Raymond, Ohio EPA</i>
5:00 pm	Adjourn	
7:10 pm	Optional Cincinnati Reds vs. Texas Rangers Baseball Game at the Great American Ball Park (Meet at 6:30 pm in the Hyatt Regency first floor lobby)	

## Wednesday, August 24, 2016

8:00 am	<b>Registration</b> (Regency Ballroom Foyer – Third Floor)	
8:20 am	<a href="#">Regency BC</a> <b>Instructions for Sessions 4 and 5</b>	
8:30 am – 10:00 am	<b>Session 4 – Ask the Experts and Posters</b>	
	<b>Posters</b> (Located in the Regency Ballroom Foyer)	
	<b>Experts 1:</b> Revised Total Coliform Rule (RTCR) <a href="#">Buckeye</a>	<b>Experts 4:</b> CCL/UCMR/Health Advisories <a href="#">Regency BC</a>
	<b>Experts 2:</b> LCR and Corrosion Control <a href="#">Regency A</a>	<b>Experts 5:</b> Inorganics <a href="#">Regency F</a>
	<b>Experts 3:</b> Pathogens and Biofilm <a href="#">Regency E</a>	<b>Experts 6:</b> Disinfection and Disinfection Byproducts <a href="#">Regency G</a>
10:00 am – 12:00 pm	<b>Session 5 – Breakout Group Discussions</b>	
	<b>Group 1 – RTCR:</b> How are states and water systems implementing the RTCR?	<b>Group 4 – Algal Toxins:</b> How are states and water systems handling treatment for algal toxins?
	<b>Group 2 – Lead:</b> How are states and water systems dealing with lead contamination and lead service line replacement?	<b>Group 5 – Technology Acceptance:</b> What is needed to improve acceptance of drinking water technologies?
	<b>Group 3 – Health Advisories:</b> How are states and water systems implementing health advisories in the field?	<b>Group 6 – Communication:</b> How can communications between the states and between EPA and the states be improved?
12:00 pm	Lunch (on your own)	

## Wednesday, August 24, 2016 (continued)

1:30 pm – 3:00 pm	<a href="#">Regency A</a> <b>Session 6A – Distribution Systems III: Pathogens and Biofilm</b> <i>Moderator: Darrell Osterhoudt, ASDWA</i>	<a href="#">Regency BC</a> <b>Session 6B – Monitoring and Treatment III: Inorganics</b> <i>Moderator: Darren Lytle, Ph.D., EPA-ORD</i>
1:30 pm	Monochloramine Systems for Large Buildings <i>Colin White, University of Cincinnati</i>	Multiple Contaminant Removal by Ion Exchange and Reverse Osmosis <i>Thomas Sorg, EPA-ORD</i>
2:00 pm	Louisiana’s Disinfection Rule – The Current State of Affairs <i>Steven Joubert, Louisiana Department of Health</i>	Fluoride Removal with Activated Alumina <i>Bill Reid, Axens North America</i>
2:30 pm	Ohio’s Approach to Addressing <i>Legionella</i> in Drinking Water <i>Jeff Davidson, Ohio EPA</i>	Controlling Manganese in Treatment Plants and Distribution Systems <i>Philip Brandhuber, Ph.D., HDR Engineering</i>
3:00 pm	Break	
3:30 pm – 5:00 pm	<a href="#">Regency A</a> <b>Session 7A – Distribution Systems IV: Disinfection and Disinfection Byproducts (DBPs)</b> <i>Moderator: Michael Finn, P.E., EPA-OW</i>	<a href="#">Regency BC</a> <b>Session 7B – Monitoring and Treatment IV: Analytics and Tools</b> <i>Moderator: Thomas Speth, Ph.D., EPA-OW</i>
3:30 pm	Implementation of Stage 2 DBPR Efforts to Reduce DBPs <i>Turner Morrison, North Carolina Department of Environmental Quality</i>	Tools for Small Systems to Evaluate and Select Appropriate Treatment Technologies <i>Bill Hogrewe, Ph.D., Rural Community Assistance Partnership (RCAP)</i>
4:00 pm	Disinfectant Residual – Representative Monitoring and Minimum Residual Implications <i>Jonathan Pressman, Ph.D., EPA-ORD</i>	UCMR3 Virus Monitoring <i>G. Shay Fout, Ph.D., EPA-ORD</i>
4:30 pm	Effects of Raising Minimum Chlorine Residuals on DBPs <i>Damon Roth, Environmental Engineering &amp; Technology, Inc.</i>	Hydraulic Modeling, SCADA Data, and Analytics to Enhance Distribution System Operations <i>Regan Murray, Ph.D. and Robert Janke, EPA-ORD</i>
5:00 pm	Adjourn	

## Thursday, August 25, 2016

8:00 am	<b>Registration</b> (Regency Ballroom Foyer – Third Floor)
8:30 am – 10:00 am	<a href="#">Regency ABC Ballroom</a> <b>Session 8 – Crosscutting Issues of Concern</b> <i>Moderator: Jim Taft, ASDWA</i>
8:30 am	National Centers for Innovation in Small Drinking Water Systems: WINSSS Status Report <i>Bruce Dvorak, Ph.D., University of Nebraska</i>
9:00 am	National Centers for Innovation in Small Drinking Water Systems: DeRisk Center Status Report <i>Chad Seidel, Ph.D., University of Colorado Boulder</i>
9:30 am	Overview of Current Actions <i>Scott Randall, NSF International</i>
10:00 am	Break
10:15 am – 11:30 am	<a href="#">Regency ABC Ballroom</a> <b>Session 9 – Workshop Wrap-up</b> <i>Moderator: Thomas Sorg, EPA-ORD</i>
10:15 am	Reports of Breakout Groups (10 minutes discussion on each topic)
11:15 am	Closing
11:30 am	Adjourn
1:00 pm – 2:30 pm	Optional Tour of EPA’s Andrew W. Breidenbach Environmental Research Center <i>(Meet at 11:30 am in Regency BC for instructions)</i>