





Onsite Water Reuse Summit

Integration of Science, Policy, and Operation for Safe and Effective Implementation April 10-11, 2024

U.S. EPA Headquarters William Jefferson Clinton East Building 1201 Constitution Avenue, Washington, D.C.

April 10, 2024

- 8:30-8:45 **Welcome Remarks** Mae Wu (Deputy Assistant Administrator for U.S. EPA Office of Water), introduced by Deborah Nagle (Office Director for Office of Science and Technology, U.S. EPA Office of Water)
- 8:50-9:55 Ensuring Safe Implementation

 Moderator: Brian Good, Denver Water
 - National Water Reuse Action Plan Update Dr. Sharon Nappier, U.S. EPA
 - Overview and Accomplishments of the National Blue Ribbon Commission for Onsite Non-potable Water Systems (NBRC) - Paula Kehoe, San Francisco Public Utilities Commission (SFPUC)
 - 2017 Health Risk Based Framework Dr. Sybil Sharvelle, Colorado State University
 - Updates to Health Risk-based Frameworks and State of Science QMRA -Dr. Michael Jahne, U.S. EPA

10:00 – 10:35 *Implementing Policies and Programs*

Moderator: Tressa Nicholas, Idaho Department of Environmental Quality

- Colorado Regulations Emily Wong, Colorado Department of Public Health and Environment
- San Francisco and Proposed California Regulations Taylor Nokhoudian, SFPUC
- Proposed Washington Regulations Steve Deem, Washington State Department of Health

 New York City Department of Environmental Protection Program - Alan Cohn, NYC DEP

10:35-10:50 **Break**

10:50-12:00 Conducting Research to Advance Onsite Water Recycling Moderator: Justin Mattingly, U.S. EPA

- Integrated Onsite NPR Modeling: Risk Tradeoffs and Updates to EPA's NEWR Calculator - Dr. Cissy Ma, U.S. EPA
- Development of Log Reduction Values for Onsite NPR Wetlands and Other Treatment Systems - Dr. Sam Arden, ERG
- LCCA on Water Reuse for Resilient Buildings Dr. Andy Hur, USACE ERDC
- Conducting Research for Onsite Water Recycling Dr. Harry Zhang, Water Research Foundation (WRF)
- State of the Science on Stormwater Microbial Quality and Treatment Requirements - Dr. Sybil Sharvelle, CSU
- Operator Certificate Program Katherine Jashinski, City of Austin
- Single Family Water Reuse Applications Paula Kehoe, SFPUC

12:00-1:10 **Lunch On Your Own**

1:10-1:30 Reenter EPA Building and Go Through Security

1:30-2:30 Deploying Onsite Treatment Systems and Lessons Learned Part 1 Moderator: Taylor Nokhoudian, SFPUC

Implementing in San Francisco and Washington D.C.

- SF Permitting Program and Lessons Learned Doug Obana, San Francisco Department of Public Health
- Steve Panelli, San Francisco Department of Building Inspection
- Stormwater Reuse Guidelines and Permitting Julienne Bautista, DC
 Department of Energy & Environment
- Treating Water Onsite at DC Water Headquarters Robert Bornhofen, DC Water

2:35-3:40 *Financing ONWS*

- Assessing Costs of Onsite Water Treatment Systems Katherine Jashinski,
 City of Austin
- Net Zero Water Toolkit Sharlene Leurig, Texas Water Trade

- District-Scale Implementation and Costs Bryce Wilson, Lotus Water
- Federal Funding Opportunities Alison Souders, U.S. EPA
- Opportunities for Affordable Housing and Equity Jennifer Walker,
 National Wildlife Federation

3:45-4:30 Polling: What Else is Needed to Scale Up Onsite Water Treatment Systems?

4:30 Meeting Adjourn

5:00 **Optional Happy Hour at Astro Beer Hall** (12 min walk)

1306 G St NW, Washington, DC $\,$

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April 11, 2024

8:30-8:40 **Welcome to Day 2** – Remarks from Bart Weiss, WateReuse Association President

8:40-9:15 Aligning Plumbing Codes and Standards

Moderator: Bill Platten, U.S. EPA

- International Code Council (ICC) Rich Anderson
- International Association of Plumbing & Mechanical Officials (IAPMO) -Christopher A. Lindsay
- American Rainwater Catchment System Association (ARCSA) Benjamin Sojka
- National Sanitation Foundation (NSF) Derek Deland
- General Services Agency (GSA) Lance Davis
- 9:20-9:35 **Remarks from David M. Turk**, Deputy Secretary, U.S. Department of Energy, introduced by Tanya Mottley (Deputy Director for Office of Science and Technology, U.S. EPA Office of Water)
- 9:40-11:15 Deploying Onsite Treatment Systems and Lessons Learned Part 2
 Moderator: Dr. Jay Garland, U.S. EPA

Learning from Designers and Operators

- Biohabitats Erin English
- Trussell Technologies Dr. Brian Pecson
- Sherwood Engineers Jeannette Laramee
- Ecovie Water Management Robert Drew
- Cambrian Innovation Matt Silver
- Aquacell Ben Arnold
- NSU Zach Gallagher
- Epic Cleantec Aaron Tartakovsky

11:15-11:30 Break

11:30-12:15 Advancing Beyond Non-potable Reuse

- Advancing Equitable and Circular Water Solutions Through Source Separation - Dr. Miriam Hacker, WRF
- Rainwater for Potable Use Anthony Creech, Virginia Public Health
- Producing Purified Water at SFPUC headquarters Dr. Brian Pecson, Trussell Technologies

12:15-1:25 **Lunch On Your Own**

1:25-1:45 Reenter EPA Building and Go Through Security

1:45-2:30 Addressing Off the Grid

Moderator: Alex Fairhart, Personal Water Systems

- Research and Development of Deployable Water Reuse Systems for Military Applications - Dr. Martin Page, USACE ERDC
- NEWgenerator Resource Recovery Machine for Non-Sewered Sanitation and Onsite Water Recycling - Dr. Daniel H. Yeh, University of South Florida
- Transforming Sanitation to Combat the Global Water Crisis How will next generation off-grid sanitation technologies contribute to climate resilience? - Dr. Doulaye Kone, Gates Foundation

2:35-3:40 *Visioning for the Future*

Moderator: Paula Kehoe, SFPUC

- Redefining Demand Management: Circular Water Solutions for a Climate-Resilient Future - Dr. Newsha Ajami, Lawrence Berkeley National Lab
- The Water Washing Machine: Taking Onsite Water Reuse Product Inspiration from the Appliance, Automotive and HVAC Industries - Dr.
 Peter Fiske, National Alliance for Water Innovation
- Our Onsite Water Future Dr. David Sedlak, UC Berkeley

3:40-4:10 Reflecting on the Summit Dr. Jay Garland, U.S. EPA

4:30 **Summit Concludes**