

**TOTAL COLIFORM RULE / DISTRIBUTION SYSTEM  
STAKEHOLDER TECHNICAL WORKSHOP**

**Tuesday, January 30 – Thursday, February 1, 2007**

The Capital Hilton  
1001 16th Street, NW  
Washington, DC 20036

**UPDATED AGENDA**

**Meeting Objective:** Review available data on potential distribution system contamination issues and TCR implementation problems to enable EPA and stakeholders to:

- Enhance their understanding of the nature of the problem; and
- Ensure a shared awareness of the data available to support potential problem-solving.

**DAY 1**

**8:00 REGISTRATION / SIGN IN**

**8:30 WELCOME AND OPENING REMARKS**

- *Welcoming Remarks* (15 minutes) – Cynthia Dougherty (EPA)
- *Objectives, agenda, ground rules, and materials* (10 minutes) - RESOLVE
- *Introductions* (10 minutes) – RESOLVE / All participants
- *Background: Drivers for Revisions to the Total Coliform Rule and Consideration of Distribution System Requirements* (10 minutes) – Pamela Barr (EPA)

**9:15 CONSIDERATIONS FOR DECISION-MAKING ABOUT RISK**

- Purpose: To frame the context of the workshop and gain insights into different stakeholders' perspectives on assessing information to support problem solving.
  - Approach:
    - *Presentation: EPA's Approach to Risk Management* (15 minutes) – Jennifer McLain (EPA)
    - *Panel*: Stakeholder perspectives on factors EPA needs to take into account in making risk management decisions (30 minutes)
      - Mae Wu (NRDC)
      - Alan Roberson (AWWA)
- Discussion*: Other perspectives from participants at table (40 minutes)

**10:30 BREAK**

**10:45 PUBLIC HEALTH PERSPECTIVES ON DISTRIBUTION SYSTEMS**

- Purpose: To provide an overview of information on potential public health risks posed by distribution system contamination
  - Approach:
    - *Presentation: Available Public Health Information and the Use of the Information in Estimating the Scope of Distribution System Problems* (30 minutes) – Stig Regli (EPA)
    - *Presentation: State and Local Perspectives on the Scope of Public Health Outcomes from Distribution System Problems* (30 minutes) – Patti Fauver
- Questions of clarification/ discussion* (15 minutes)

**12:00 LUNCH****1:30 DISTRIBUTION SYSTEM PHYSICAL INTEGRITY ISSUES: CROSS CONNECTIONS AND BACKFLOW**

- Purpose: Review available information for characterizing backflow exposure and potential health risks; examine how available information and anticipated results from on-going research can be used to analyze and solve problems; and explore how States and systems have used available information to make cross-connection decisions in on-going programs.
  - Approach (3 presentations):
    - *Presentation: Overview of Available Information on Cross-Connections and Backflow* (25 minutes) -- Paul Schwartz (USC)
    - *Presentation: Use of Available Information on Cross-Connections and Backflow* (35 minutes) – Kenneth Rotert (EPA)
- Questions of clarification / discussion* (60 minutes)

**3:30 BREAK****3:45 DISTRIBUTION SYSTEM PHYSICAL INTEGRITY ISSUES: CROSS CONNECTIONS AND BACKFLOW (continued)**

- *Presentation: Use of Cross-Connections and Backflow Information in Support of Implementing a State Program* (20 minutes) – Simon Tung (Washington Department of Health)
- Questions of clarification / discussion* (30 minutes)

**4:35 PUBLIC COMMENT OPPORTUNITY****5:15 CLOSING COMMENTS****5:30 ADJOURN**

**DAY 2****8:00 REGISTRATION / SIGN IN****8:30 WELCOME / AGENDA REVIEW – Marci DuPraw (RESOLVE)****8:45 OTHER DISTRIBUTION SYSTEM PHYSICAL INTEGRITY ISSUES: INTRUSION, CONTAMINATION DURING MAIN REPAIR, AND STORAGE VESSEL INTEGRITY**

- Purpose: Review available information for characterizing exposure and potential health risks resulting from distribution system integrity problems of intrusion, contamination during main repair and storage vessel integrity; examine how available information and anticipated results from on-going research can be used to analyze and solve problems; and explore how States and systems have used available information to make decisions about managing risk of exposure through these pathways.
  
- Approach (2 presentations):
  - *Presentation: Overview of Available Information on Some Distribution System Integrity Problems and the Potential Use of the Data* (45 minutes, - Melinda Friedman (HDR))  
*Questions of clarification / discussion* (30 minutes)

**10:00 BREAK****10:15 OTHER DISTRIBUTION SYSTEM PHYSICAL INTEGRITY ISSUES (cont'd)**

- *Presentation: Use of Available Information on Intrusion to Characterize Distribution System Problems* (45 minutes) – Mark LeChevallier (American Water)  
*Questions of clarification / discussion* (30 minutes)

**11:30 LUNCH****1:00 WATER QUALITY IN THE DISTRIBUTION SYSTEM**

- Purpose: Review available information for characterizing exposure and potential health risks resulting from problems associated with growth and release of distribution system biofilms; examine how available information can be used to inform the analysis of the problem for considering problem-solving opportunities.
  
- Approach (3 presentations):
  - *Presentation: Overview of Available Information on Biofilm Microbiology, Growth and Release* (30 minutes) -- Anne Camper (Montana State University)
  - *Presentation: Microbes of Potential Concern in Distribution System Biofilms* (30 minutes) – Kellogg Schwab (Johns Hopkins University)

- ***Presentation: Use of Data to Inform Risk Characterization and Management in Addressing Biofilm Problems*** (30 minutes) – Nick Ashbolt (EPA)
- Questions of clarification / discussion*** (30 minutes)

**3:00 BREAK**

**3:15 OBJECTIVES OF TCR AND ITS INDICATORS**

- **Purpose:** Describe the objectives of the TCR, the problems that the TCR is intended to address, related indicators, and how those indicators meet TCR objectives.
  - **Approach (3 presentations):**
    - ***Presentation: EPA's Perspective on the Purpose and Limitations of TCR Monitoring*** (20 minutes) – Yu-Ting Guilaran (EPA)
    - ***Presentation: State Perspective*** (20 minutes) – Beth Messer (Ohio EPA)
    - ***Presentation: Industry Perspective*** (20 minutes) – Vanessa Speight (Malcolm Pirnie)
- Questions of clarification / discussion*** (45 minutes)

**5:00 PUBLIC COMMENT OPPORTUNITY**

**5:15 CLOSING COMMENTS**

**5:30 ADJOURN**

**DAY 3**

**8:00 REGISTRATION / SIGN IN**

**8:15 WELCOME / AGENDA REVIEW -- Marci DuPraw (RESOLVE)**

**8:30 ISSUES WITH CURRENT TCR**

- **Purpose:** Explain the State-level criteria for determining monitoring locations, timing, frequencies, and numbers; discuss different perspectives on TCR implementation issues
  - **Approach (3 presentations):**
    - ***Presentation: EPA's Perspective on TCR Implementation Issues*** (15 minutes) – Kevin Reilly (EPA)
    - ***Presentation: State Perspective on TCR Implementation Issues*** (15 minutes) – Rich Haberman (California Department of Health Services)
    - ***Presentation: Small Utility Perspective on TCR Implementation Issues*** (15 minutes) – Paul Whittemore (NRWA)
- Questions of clarification / discussion*** (30 minutes)

**9:45 BREAK**

**10:00 TCR COMPLIANCE ANALYSIS**

- Purpose: Compare various sources of TCR compliance information and discuss what the compliance data can and cannot tell us.
  - Approach (1 presentation with panel discussion):
    - *Presentation: Overview of TCR Compliance Information* (45 minutes) – Stig Regli (EPA)
    - *Panel Discussion: Perspectives on What the Available TCR Compliance Information Tells Us* (45 minutes)
      - Rich Haberman (California Department of Health Services) (5 minutes)
      - Chris Owen (Tampa Bay Water) (5 minutes)
      - David Baird (NRWA) (5 minutes)
      - Ongoing Panel Discussion: Haberman, Owen, Baird, Stig Regli (EPA HQ), Kevin Reilly (EPA Region 1) (30 minutes)
- Questions of clarification / discussion* (45 minutes)

**12:15 LUNCH**

**1:45 CURRENT USE OF DISTRIBUTION SYSTEM TOOLS FOR REDUCING DISTRIBUTION SYSTEM EXPOSURES AND TOTAL COLIFORM OCCURRENCE**

- Purpose: Review strategies system operators are currently using to minimize risk and maintain TCR compliance.
  - Approach:
    - *Presentation: Overview of Current Distribution System Risk Minimization Techniques* (45 minutes) – Gregg Kirmeyer (HDR)
- Questions of clarification / discussion* (30 minutes)

**3:00 BREAK**

**3:15 PUBLIC COMMENT OPPORTUNITY**

**3:45 CLOSING COMMENTS (EPA)**

**4:00 ADJOURN**