

# Collection Systems Digital Conference 2020

# Agenda

(Updated June 1, 2020)

### **LIVE Virtual Mobile Session**

#### Wednesday, June 3 1:00 PM – 3:00 PM EST

This live event will be recorded and added to the online component of the Collection Systems Digital Conference. These times are approximate, and there will be some time included for switching speakers and intros.

#### 1:00 PM Welcome and How Tos

#### **Technical Presentations**

- 1:10 PM Tools and Technics for Injection Grouting to stop Groundwater Infiltration in Municipal Sewers Marc Anctil, Logiball, Inc.
- 1:25 PM Inspecting More to Clean Better: How to Focus Collection System Resources with Acoustic Inspection Technology Walt Woodard and Alex Churchill, Infosense, Inc.
- 1:40 PM Precision I&I Micro Detection Michelle Harrod, *Dukes*

#### **Emerging Technologies Presentations**

- **1:55 PM** Using Machine Learning to Automate QA/QC on Large Data Sets Kevin Marsh, *Flowworks, Inc.*
- 2:10 PM Improving Small Wastewater Stations with Advance Controls Tyler Elkins, *Xylem, Inc*
- 2:25 PM Nautilus System: Innovative, Efficient and Cost-Effective Solution for Gas Pocket Detection in Large Diameter Pressure Pipelines Ramsey T. Hemaidan, *Hydromax USA*
- 2:40 PM Acquiring Needed Expertise: How to Assimilate and Analyze Mountains of Data Jay Boyd and Kevin Effinger, ADS Environmental Services

# Virtual Facility Tour of the John T. Hickerson Wastewater Treatment Facility in El Paso, Texas

This video tour will offer you the opportunity to explore El Paso's John T. Hickerson Water Reclamation Facility, which treats up to 17.5 MGD of wastewater from residential and industrial sources. The plant is an extended aeration activated sludge treatment plant with no primary clarifiers that uses both electric- and gas-powered air blowers in the treatment process. The plant also uses UV light as a means of disinfection of treated wastewater. All odorous treatment units are fully enclosed, and special units eliminate odors before exhaust air is discharged into the atmosphere. Odor treatment technologies employed include an upstream superoxygenation system, chemical scrubbing of odorous air, and carbon scrubbing. Solids are processed at the plant using dissolved air flotation for thickening and belt filter pressing with lime stabilization of the biosolids. The plant produces over 1 MGD of reclaimed water using disc filtration, which is delivered to Coronado Country Club Golf Course and various parks and schools in west El Paso.

# **Technical Sessions**

The digital conference consists of sessions curated for the Collection Systems 2020 Conference on each of the below topics. Each video presentation listed below is approximately 15-20 minutes in length. Take the quiz at the end of each session in order to get PDHs.

# Session 1: Pump Stations/Odors

Moderators: Greg Heath, AECOM; Christy Willson, Horner & Shifrin

- Adapting Collection System Infrastructure to Changing Flood Vulnerabilities Southeastern Massachusetts Case Studies <u>Anastasia Rudenko</u>, Marc Drainville, GHD
- City of San Mateo Dale Avenue Pump Station Transient Analysis <u>Michael Georgalas</u>, Stantec Consulting Services Inc.
- It Sticks And It Stinks! <u>David Trejo</u>, Derek Schwanke, RJN Group; Elizabeth Boddicker, Upper Trinity Regional Water District
- Super Oxygenation for Collection System Odor Control Scott Cowden, <u>Michael Ancell</u>, Jacobs; Thomas Cieslik, David Ornelas, El Paso Water; Aide Zamarron; Mark Smith, Jacobs

# Session 2: Inflow and Infiltration

Moderators: Christy Willson, Horner & Shifrin; Diane Grossenheider, Black & Veatch

- The Seduction of Depth-only Measurement for I/I Work <u>Patrick Stevens</u>, ADS Environmental Services; Derek Sutton, Citizens Energy Group
- How Much Rainwater Are You Treating? Solutions and Budgeting for Effective I&I Reduction for a TCEQ SSO Initiative from Conroe's Perspective <u>Kendall Ryan</u>, Ishita Rahman, Freese and Nichols, Inc.; Rafael Carrasquillo, City of Conroe

# **Session 3: Modeling**

Moderator: Jennifer Steffens, Xylem, Inc.

- Unique Approaches to Using Hydraulic Models to Assist System Capacity Management and Sewer Assessment and Rehabilitation for DeKalb County Darren Eastall, <u>Chunxian Li</u>, DeKalb County; Haiyi (Helen) Lu, Jacobs; Nancy Schultz, CH2M
- Understanding and Mitigating Hydrogen Sulfide Impacts through Collection
  System Modeling
  <u>Kelsey Kenel</u>, HDR; Chris Easter; Louis Engels; Coralynn Revis, HDR; Jes Vollertsen,
  Aalborg University

#### Session 4: Operation & Maintenance

Moderator: Karyn Stickel, Hubbell, Roth & Clark

- The New 'P' in Your Collection System Maintenance Program Predictive Cleaning <u>Alexander Palmatier</u>, Jacob Mueller, HDR; Matthew Whitman, Winston-Salem Forsyth County Utilities
- Control What You Can, Accept What You Can't: How CMOM Can Reduce the Impact of SSOs

<u>Daniel Porter</u>, Brown and Caldwell; Michael Erkkila; Gary Fedak, Lake County Dept. of Utilities, OH; Steve Donovan, Brown and Caldwell

### **Session 5: Sanitary Sewer Overflows**

Moderator: Greg Heath, AECOM

- Optimizing Tunnel Shaft Design for Performance and Constructability: The Singapore Experience <u>Christopher Ranck</u>, Arcadis; John Richardson; Heather Smith, Randy Lagumbay, Arcadis; Michael Schumas, Ed. Zublin AG; Ho Hong Whatt, Chua Wei Rong, Darryl Tan, Singapore PUB
- Getting the most out of your limited CIP dollars Wet weather storage solution to reduce CIP spending while improving performance
  <u>Carlos Toro-Escobar</u>, Brown and Caldwell; Ashley Yeh, Berkeley County Water and Sanitation; A. Retana, Brown and Caldwell
- Achieving Consent Order Compliance: Comprehensive Mini-Basin Planning and Rehabilitation to Eliminate Sanitary Sewer Overflows and Reduce Hydraulic Overloads

Joel Kostelac, Josiah Bair, GHD Inc.

#### Session 6: Asset Management

Moderator: Peter Garvey, Dewberry

- Coachella Valley Water District: A Festival of Asset Management
  <u>James Reitmeier</u>, Clinton McAdams, Black & Veatch; Bethany McDonald, HDR Inc;
  James Strayer, Black & Veatch; Daniel Charlton, Coachella Valley Water District
- Is there an "Easy Button" for Making Asset Management Planning Decisions?
  Using Operational Data to Inform System Renewal Planning Processes
  David Saunders, Jacob Mueller, HDR

# **Session 7: Project Delivery**

Moderator: David Servidio, Mott Macdonald

- Successful Procedure: Wastewater Bypass in the Heart of Dallas
  Cullen Carlson, <u>Erin Flanagan</u>, Freese & Nichols Inc; Regina Stencel, Dallas Water
  Utilities
- Lessons Learned and Best Practices for Value Engineering and Contractor Engagement while Delivering Capital Projects for a \$2.4 Billion CSO Program <u>Vincent Genco</u>, <u>Scott Aurit</u> HDR; Thomas Heinemann; Adam Wilmes, Jake Hansen, City of Omaha

# Session 8: Potpourri

**Moderators:** Jennifer Welsch, Metropolitan St. Louis Water District; Jennifer Steffens, Xylem, Inc.

- A Utility of the Future Today Dale City Wastewater Collection System Yanjin Liu, Ronald Cook, Suzanne Chiavari, American Water
- Using Acoustic Inspection Technology to Prioritize Cleaning at Wastewater Utilities Gary West, City of McKinney; Walt Woodard, Infosense, Inc.
- From Visual Inspection to Fact-Based Data: Smart Eyes on the Collection System Jay Boyd, ADS Environmental; Jesus Escalona, City of San Diego
- Actionable Flow Monitoring Platform <u>Mostafa Elag</u>, Hazem Gheith, Arcadis

# **Session 9: Texas Topics**

**Moderators:** Leigh Cerda, Black and Veatch; Vincent Genco, HDR; Baltazar Lucero-Ramirez, Texas Commission on Environmental Quality

- Unintended Consequences of Water Conservation in Wastewater Collection Systems Christopher Nance, <u>Michael Ramirez</u>, Parkhill, Smith & Cooper
- The Good, The Bad, and The Ugly (Of Water Conservation and Corrosion Control) <u>Fernie Silva</u>, Brown and Caldwell
- Dynamic Duo: Integrating Capacity and Risk in a Prioritized Approach to CIP Planning
   Ethan Shires, <u>Cullen Carlson</u>, Freese & Nichols Inc; Melvin Machayo, Dallas Water Utilities
- The Effect of "The internet of things " IoT on Wastewater Treatment & Operations and Utility Management Shannon Dunne, Vince Turner, City Of Houston