

WATER REUSE & INDUSTRIAL WASTEWATER

2015
SPECIALTY
CONFERENCE
& WORKSHOP
SERIES



April 28 • University of Hartford Conference Center, West Hartford, CT

Agenda – Tuesday, April 28, 2015

- 7:30 AM Registration/Continental Breakfast
- 8:30 AM **Welcome and Opening Remarks (Wilde Auditorium)**
 CT State Senator Ted Kennedy, Jr. (*invited*)
 Matt Formica, NEWEA President
 Ed Whatley, Chair, Water Reuse Committee
 Lisa Andrews, Chair, Industrial Wastewater Committee
- 9:15 AM *Water Re-Use System for Industrial Discharger*
 – Tim St. Germain, Fuss & O'Neill
- 9:45 - 10:00 AM Coffee Break
- 10:00 AM - 12:00 Noon **CONCURRENT SESSIONS**

| | Session A (Wilde Auditorium) | Session B (Room C) |
|--------------------|---|---|
| | Planning for Reuse – Part 1 Moderators: David Young, CDM Smith & Nick Ellis, Hazen & Sawyer | Commercial and Institutional Water Reuse Moderators: Matt Dickson, MGD Process & Hardik Raval, Town of Concord |
| 10:00 – 10:30 AM | <i>The Customer is Key—How to Design A Reuse System to Maximize Satisfaction and Minimize Cost</i> – Lynne Putnam, Dewberry | <i>On-Campus Water Reuse: Reliability & Readiness</i> – Scott Nelles, Sustainable Water |
| 10:30 – 11:00 AM | <i>Water Conserv II Sets the Standard for Reuse Projects in the Northeast</i> – Jay Sheehan, Woodard & Curran | <i>Overcoming Water Scarcity in the “Water-Rich” Northeast at the University of Connecticut</i> – Rob Scott, Woodard & Curran |
| | Planning for Reuse – Part 2 | Water Conservation and Reuse Technologies |
| 11:00 – 11:30 AM | <i>Improving Competitiveness Through Financial Assessment of Water Reuse Technologies</i> – Marina Fernandes and Paul Sinisgalli, CDM Smith | <i>Water Conservation Technology for Recirculating Cooling Systems</i> – Karen Golmer, New England Water Innovation Network and John Rowen, Capture H2O, Inc. |
| 11:30 – 12:00 Noon | <i>Reuse of Secondary Treated Effluent for Potential Power Plant Cooling Supply</i> – Christine Kurtz, Wright-Pierce – Brian Armet, Mattabassett District | <i>Innovative Single Pass Process Intensified MBR Design Producing Excellent Effluent Quality</i> – Rahul Thukral, OVIVO USA |

- 12:00 - 1:00 PM Lunch (provided) - Buffet in Rotunda/seating in 1877 Club
- AFTERNOON SESSION (Wilde Auditorium)**
 Moderators: Sarah White, Unifirst Corp. & Debbie Hoyes, ARCADIS
- 1:00 – 1:30 PM *Industrial Wastewater as an Alternative Carbon Source*
 – Matthew Gray, Keystone Engineers
- 1:30 – 2:00 PM *Water Reuse for a Commercial Greenhouse*
 – Elizabeth Troop, Fuss & O'Neill
- 2:00 – 2:30 PM *Cost-Effective Industrial Water Reuse*
 – Carl Wilcox, Woodard & Curran
- 2:30 – 4:30 PM **UTC Aerospace Wastewater Treatment Facility Tour**
 Transportation on own. Onsite registration not allowed due to security.
- 4:30 PM Closing Remarks / Adjourn

EXHIBITORS

Aqua Solutions, Inc.
 Retain-It LLC
 Smith & Loveless, Inc.
 Sustainable Water

Plan to visit the exhibitors during breaks and lunch

OVER

SPEAKER & PRESENTATION INFORMATION

Water Re-Use System for Industrial Discharger – **Tim St. Germain, Fuss & O'Neill**

The Customer is Key—How to Design A Reuse System to Maximize Satisfaction and Minimize Cost
How identifying customers and customers needs by types will provide important criteria to design storage and distribution as well as identifying limitations on water quality. – **Lynne Putnam, Dewberry**, lputnam@dewberry.com

Water Conserv II Sets the Standard for Reuse Projects in the Northeast

Water Conserv II in Winter Garden, FL is an award winning facility and one of the world's largest reclamation projects. – **Jay Sheehan, Woodard & Curran**, jsheehan@woodardcurran.com

Improving Competitiveness Through Financial Assessment of Water Reuse Technologies

The drivers of water reuse technologies and the adaptability of this economic financial tool to industries in New England and its effective use to leverage sustainability. – **Marina Fernandes, fernandesms@cdmsmith.com** and **Paul Sinisgalli, CDM Smith**, sinisgallipd@cdmsmith.com

Reuse of Secondary Treated Effluent for Potential Power Plant Cooling Supply

Mattabassett District's 100 million upgrade includes a dual purpose effluent pumping station to pump treated wastewater to the CT river during flooding conditions and pump treated wastewater for reuse. – **Brian Armet, Mattabassett District**, bwarmet@mattdist.org and **Christina Kurtz, Wright-Pierce**, christina.kurtz@wright-pierce.com

On-Campus Water Reuse: Reliability & Readiness

These institutions demonstrate how campus-wide wastewater reclamation provides cost savings, reliability, and N+1 readiness in the midst of 21st century water stresses. – **Scott Nelles, Sustainable Water**, scott.nelles@sustainablewater.com

Overcoming Water Scarcity in the "Water-Rich" Northeast at the University of Connecticut

University of CT's growth and sustainability efforts and a watershed event that prompted them to proactively incorporate the use of reclaimed water in campus operations. – **Rob Scott, Woodard & Curran**, rscott@woodardcurran.com

Water Conservation Technology for Recirculating Cooling Systems

Description and case studies of patented, water and energy saving cooling water technology that reduces water usage, sewer discharge and chemical usage. – **Karen Golmer, New England Water Innovation Network**, kgolmer@newengland-win.org and **John Rowen, Capture H2O, Inc.**, john@captureh2o.com

Innovative Single Pass Process Intensified MBR Design Producing Excellent Effluent Quality

General technology overview, pilot testing and actual data from operating plants will be presented. – **Rahul Thukral, OVIVO USA**, rahul.thukral@ovivowater.com

Industrial Wastewater as an Alternative Carbon Source

Lowering the cost of disposing sugar water generated by a sugar distribution center by transforming it into a reusable product for local WWTPs. – **Matthew Gray, Keystone Engineers**, mgray@kegi.net

Water Reuse for a Commercial Greenhouse

Describes the water recycle and treatment system used at Grower Direct Greenhouses in Somers, CT. – **Elizabeth Troop, Fuss & O'Neill**, etroop@fando.com

Cost-Effective Industrial Water Reuse

A gelatin plant installs a tried and true filtration system to allow reuse of 275,000 pgd. Industrial projects need a less than 3-year payback preferable less than 2-years to be funded. This project achieved a 1.1. year payback on a \$1.2 million investment. – **Carl Wilcox, Woodard & Curran**, cwilcox@woodardcurran.com

UTC Aerospace Wastewater Treatment Facility Tour

UTC Aerospace Systems operates a state-of-the-art industrial wastewater treatment facility for the treatment and recycling of wastewater generated from categorical metal finishing operations and related activities. The wastewater treatment facility includes pretreatment of segregated wastewaters including chromium reduction and microfiltration; primary treatment consisting of equalization, neutralization, metal hydroxide precipitation and multi-media filtration; and water reuse consisting of carbon filtration, water softening, reverse osmosis and vacuum distillation. The treatment facility is designed to treat and recycle in excess of 100,000 gallons per day and is fully automated utilizing PLC and SCADA.

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Kleinfelder

The MAHER Corporation

Tighe & Bond

Weston & Sampson

as of 4/17/15

TRAINING CONTACT HOURS

Training Contact Hours (TCHs) will be awarded for operator recertification for participating states. If you need TCHs, please sign-up at the end of the day (2:30PM) at the registration desk. Certificates will be sent to attendees following the event.

PROCEEDINGS

In an effort to reduce/reuse/recycle copies of today's presentations will be posted on the NEWEA website. Attendees will be notified when the presentations are available.



NEWEA

Tower Office Park, Ste 601
Woburn, MA 01801
781-939-0908
www.newea.org

NEWEA Water Reuse & Industrial Wastewater Conference - Attendee List as of 5/4/15

| | | | | |
|-------------|-------------|---|------------------|----|
| Paul | Sinisgalli | CDM Smith | Boston | MA |
| Matthew | Gray | Keystone Engineering Group, Inc. | Frazer | PA |
| Rahul | Thukral | Ovivo USA | Austin | TX |
| Timothy | St. Germain | Fuss & O'Neill | West Springfield | MA |
| John | Rowen | Capture H2O Inc | Carlsbad | CA |
| Carlton | Wilcox | Woodard & Curran Inc | New Gloucester | ME |
| Elizabeth | Troop | Fuss & O'Neill | Trumbull | CT |
| Karen | Golmer | New England Water Innovation Network | 381a Huron Ave | MA |
| Eric | Lohan | Sustainable Water | Glen Allen | VA |
| Christine | Kurtz | Wright Pierce | Middletown | CT |
| Lynne | Putnam | Dewberry | Baltimore | MD |
| Mariana | Miller | DEEP | Hartford | CT |
| Jeff | Koetteritz | VHB | Watertown | MA |
| Kenneth | Levesque | Town of Manchester Hockanum River WPCF | Manchester | CT |
| Jay | Kulowiec | Industrial Water/Wastewater Consultancy | Old saybrook | CT |
| Stephen | Edwards | Town of Westport | Westport | CT |
| Marina | Argueta | Sikorsky Aircraft Corporation | Waterbury | CT |
| Michelle | Ryan | Mattabassett Dist | Cromwell | CT |
| Don | Brindley | Desalitech, Inc. | Downingtown | PA |
| Katie | Milardo | University of Connecticut | Storrs | CT |
| Jason | Coite | University of Connecticut | Storrs | CT |
| Tim | Clayton | Holland Company | Valatie | NY |
| John | Miceli | Birk Manufacturing, Inc. | East Lyme | Ct |
| Rick | Johnson | Clearas Water | Madison | OH |
| Dan | Murphy | CDM Smith | east Hartford | CT |
| Charles | Nehrig | TTM Technologies | Stafford | CT |
| Allison | MacKay | University of Connecticut | Storrs | CT |
| Janice | Moran | NEWEA | Woburn | MA |
| Brian | Boyson | Boyson and Associates, Inc. | Bridgewater | MA |
| Matthew | Dickson | MGD Process | Boylston | MA |
| Sarah | White | Unifirst Corp | Wilmington | MA |
| Nick | Ellis | Hazen and Sawyer | Boston | MA |
| Matt | Formica | AECOM | Wakefield | MA |
| Virgil | Lloyd | Fuss & O'Neill Inc | Manchester | CT |
| Christopher | Ecsedy | Fuss & O'Neill Inc | Mansfield Center | CT |
| Mike | Wilson | CH2M Hill | Boston | MA |
| Mary | Jersey | Town Of Greenwich | Ansonia | CT |
| Corey | Therault | AMEC | Portland | ME |
| Meredith | Zona | Fay Spofford & Thorndike | Burlington | MA |
| Hans | Tuneblom | Veolia | Boston | MA |
| Daniel | Imig | City of Alexandria | Rocky Hill | CT |
| Jeffrey | Briggs | Capaccio Environmental Eng | Marlborough | MA |

| | | | | |
|-----------|---------------|-----------------------------|-------------|----|
| Jim | Russell | Russell Resources Inc | Brewer | ME |
| Jay | Sheehan | Woodard & Curran Inc | Cheshire | CT |
| Guy | Marchesseault | | Boxford | MA |
| Donald | Goodroe | United Water | Wilbraham | MA |
| Russell | Parkman | GZA GeoEnvironmental Inc | Norwood | MA |
| Chris | Shea | Aqua Solutions | Middleboro | MA |
| David | Young | CDM Smith | Mansfield | MA |
| Marina | Fernandes | CDM Smith | Boston | MA |
| Wayne | Bates | Capaccio Environmental Eng | Marlborough | MA |
| Daemian | Foster | Tighe & Bond | Westfield | MA |
| Jason | Tang | Fuss & O'Neill Inc | Manchester | CT |
| Elizabeth | Andrews | Barr Engineering Co. | Falmouth | ME |
| Robin | Tiede | Hubbard Hall Inc | Waterbury | CT |
| Debbie | Hoyes | ARCADIS | Middletown | CT |
| Brian | Armet | Mattabassett Dist | Cromwell | CT |
| Bruce | Douglas | Applied Water Management | Fall River | MA |
| Eric | Hess | F R Mahony & Assoc | Schenectady | NY |
| Peter | Garvey | Dewberry | Boston | MA |
| Edward | Whatley | Vanasse Hangen Brustlin Inc | Watertown | MA |
| Jasmine | Tyson | | Hartford | CT |
| Matt | Hross | Hazen and Sawyer | Groton | CT |
| Hardik | Raval | Town of Concord | Concord | MA |
| Edwin | Muniz | ARCADIS | Middletown | CT |
| Robert | Scott | Woodard & Curran Inc | Colchester | CT |
| Stephen | Jessup | Corbin Russwin Inc. | Meriden | CT |
| E Ryan | Donovan | Corbin Russwin Inc. | Westfield | MA |
| Joe | Alosso | Plainville Water & Sewer | Plainville | CT |
| Scott | Lander | Retain-It LLC | Granby | CT |
| Tim | Paulsen | Smith & Loveless | Lenexa | KS |
| Aaron | Hollander | Sustainable Water | Richmond | VA |
| Warren | Brown | Aqua Solutions | Middleboro | MA |