Learning Objectives

You will be able to:

- Explore different types of public water supply systems and define their basic objectives.
- Receive an update on recent state drinking water regulatory rule-making in Pennsylvania, New Jersey, Maryland, and Delaware.
- Evaluate case studies of different types and sizes of water supply systems.
- Discuss groundwater and surface water treatment processes.
- Handle design constraints due to flow, pressure, and water age.
- Identify common failure mechanisms impacting water quality and quantity.

Presented by Lori A. Burkert, P.G., M.S.

Public Water Supply Systems: An Introduction

What is a public water system?

- Definitions:
  - Public vs. private
  - Transient vs. non-transient
- Basic objectives: quantity and quality
  - Calculating demand: domestic flows and fire suppression
  - Typical sources of raw water
- Major infrastructure: source, transmission, treatment, pumping, distribution, storage, services
- Small group activity: developing a water supply master plan

Federal and State Regulatory Framework

- Federal Safe Drinking Water Act (SDWA)
- Alphabet soup: Review of federal rule-making:
  - The surface water treatment rule (SWTR)
  - The groundwater rule (GWR)
  - Distribution-related rules (DBPR, DBP, LCPR, TCR)
  - Chemical contaminants (arsenic, LCR, radionuclides)
- State drinking water programs:
  - Recent rule-making (PA, NJ, MD, DE)
  - Emerging contaminants
  - Group survey: public notification requirements

Sources and Treatment

- Water sources: quantity, quality, and reliability
- Surface water treatment processes
- Groundwater treatment processes
- Permitting, compliance and reporting
- Case studies: water supply for multiple client types and sizes

Transmission, Distribution, and Storage

- Design constraints: flow, pressure, water age
- Distribution system
- Distribution storage
- Maintenance
  - System mapping (GIS/CAD)
  - Hydraulic modeling
- Water loss and leak management
- Water quality
  - Compliance and reporting
  - Small group activity: water quality in distribution systems

Emergency Preparedness and Response

- Common failure mechanisms
- Results/discussion of group survey on public notification requirements
- Emergency response planning
- Lessons from Flint, Michigan

Public Water Supply Systems

Fort Washington, PA - Wednesday, April 17, 2019

Receive an introduction to public water supply systems

Consider the federal and state regulatory framework

Examine water sources and compare treatment options

Continuing Education Credits

- Professional Engineers: 6.5 PDHs
- Professional Geologists: 6.5 PDHs
- Pennsylvania Attorneys: 6.5 CLE Hours
Seminar Information

Hilton Garden Inn Fort Washington
530 W. Pennsylvania Avenue
Fort Washington, PA 19034
(215) 646-4637

Tuition
$289 for individual registration
$269 for three or more registrations.

Included with your registration:
Complimentary continental breakfast and printed seminar manual.

Additional Learning

Webinar Series
National Electrical Code
- National Electrical Code, Part I
  Wed., March 6, 2019, 11:00 AM - 1:00 PM CDT
- National Electrical Code, Part II
  Thurs., March 7, 2019, 11:00 AM - 3:30 PM CDT
- National Electrical Code, Part III
  Fri., March 8, 2019, 1:00 PM - 5:30 PM CDT

Commercial Solar Peaker Batteries
- Commercial Solar Peaker Batteries, Part I
  Wed., March 13, 2019, 11:00 AM - 3:15 PM CDT
- Commercial Solar Peaker Batteries, Part II
  Thurs., March 14, 2019, 11:00 AM - 2:15 PM CDT

Handling Ethical Issues in Professional Engineering Practice
Fri., March 15, 2019, 11:00 AM - 12:00 PM CDT

Structural Forensic Engineering
- Introduction to Forensic Engineering Process
  Wed., March 27, 2019, 11:00 AM - 1:00 PM CDT
- Causes of Failures and the Forensic Engineering Report
  Wed., March 27, 2019, 1:30 PM - 3:30 PM CDT
- Forensic Examination of Structures and Use in Litigation
  Thurs., March 28, 2019, 8:00 AM - 1:00 PM CDT

Foundation Damage and Repair
- Structure Loads, Soil Mechanics, Bearing Capacity and Geoenvironmental Hazards
  Thurs., March 28, 2019, 11:00 AM - 3:30 PM CDT
- Foundation-Wall Design and Construction
  Thurs., March 28, 2019, 1:00 PM - 3:00 PM CDT
- Assessment of Foundation-Slab Damage & Repair Alternative
  Fri., March 29, 2019, 11:00 AM - 12:30 PM CDT
- Assessment of Foundation-Retaining Wall Damage & Repair Alternatives
  Fri., March 29, 2019, 1:00 PM - 2:50 PM CDT

For more information visit:
www.halfmoonevents.org/webinars/

Tuition
I will be attending the live seminar. Single Registrant - $289.00. Three or more registrants from the same company registering at the same time - $269.00 each.
I am not attending. Please send me the self-study package:
□ Downloadable MP3 Audio/PDF Manual for $269.00.
□ CD/Manual Package for $289.00. (S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.
Credit Card: Mastercard, Visa, American Express, or Discover
Credit Card Number: ____________________________
Expiration Date: ____________________________
CVV2 Code: ____________________________
Cardholder Name: ____________________________
Billing Address: ____________________________
City: ____________________________ State: ________ Zip: ________
Signature: ____________________________
Email: ____________________________

© 2019 HEI #19 PAPHZOSS 4 17 FTWA TC