

Agenda

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

Introduction to Public Water Supply Systems

What is a public water system?

Definitions

- Public vs. private
- Community, non-community, transient, non-transient
- Bottled, vended, bulk, consecutive

Quantity and quality objectives

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)

Review of federal rule-making

- The Surface Water Treatment Rule (SWTR)
- The Groundwater Rule (GWR)
- Distribution-related rules (DRR, DBP, LCR, TCR)
- Chemical contaminants (arsenic, LCR, radionuclides)

State drinking water programs and recent rule-making (PA, OH, WV, MD)

Emerging contaminants

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 and storage

Maintenance

Considerations

- System mapping (GIS/CAD) and 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

Emergency response planning

Public Water Supply Systems

Coraopolis, PA - Thursday, November 21, 2019



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Learning Objectives

You'll be able to:

Define what a public water supply system is and explore its basic objectives.

Receive an update on federal and state regulatory rule-making, including the surface water treatment rule and the groundwater rule.

Evaluate case studies of water supplies for multiple client types and sizes.

Handle design constraints due to flow, pressure and water age.

Identify common failure mechanisms impacting water quality and quantity.



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Public Water Supply Systems

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Receive an introduction to public water supply systems

Consider federal and state regulatory frameworks

Examine water sources and compare treatment options

Learn about water transmission, distribution and storage

Discuss emergency preparedness and response

Continuing Education Credits

Professional Engineers

6.5 PDHs

Professional Geologists

6.5 PDHs

Attorneys

6.5 S Pennsylvania CLE Hours



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Faculty

Lori A. Burkert, P.G., M.S. *Project Manager / GIS Manager at Entech Engineering, Inc.*
Mrs. Burkert is a professional geologist with 18 years of experience in water resources, water supply and wastewater systems. Her expertise includes source water investigation and protection, geographic information systems (GIS) mapping, water distribution system operations and maintenance, wastewater inflow and infiltration control programs, water quality, data management, regulatory compliance, field inspection and site work, and environmental consulting.

Ms. Burkert previously worked for the Pennsylvania Department of Environmental Protection as a public water supply inspector. She received a B.S. degree from Elizabethtown College in Environmental Science, and an M.S. degree from Lehigh University in Earth and Environmental Science, with a focus in (geo)chemistry.

She served as the President of the Pennsylvania state chapter of the American Water Resources Association (PA-AWRA) in 2017 and 2018.

Entech Engineering is a full service engineering firm with six office locations throughout Pennsylvania. We serve utilities, government, commercial, manufacturing, and higher education organizations. Entech offers civil, environmental, MEP, structural and architectural services, helping our clients make more informed decisions to achieve their goals.

Here’s what past attendees had to say about the program and presenter Lori Burkert:

“Excellent presentation.” — *Mechanical Engineer*

“Lori is an excellent speaker.” — *Groundwater Remediation Manager*

“Speaker was excellent—very clear & extremely knowledgeable.” — *Professional Engineer*

“Lori was fantastic. I was thoroughly impressed & would recommend this seminar to others.” — *Geologist*

Seminar Information

Pittsburgh Airport Marriott
777 Aten Road
Coraopolis, PA 15108
(412) 788-8800

Tuition

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

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

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

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Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

Continuing Education Credit Information

This seminar is open to the public offers 6.5 PDHs/continuing education hours to Pennsylvania professional engineers and geologists. Educators and courses are not subject to preapproval in Pennsylvania.

The Pennsylvania CLE Board has approved this event for 6.5 Substantive CLE hours for attorneys.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Can’t Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!
Audio recordings of this seminar are available for purchase starting at \$269. See registration panel for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Additional Learning

Webinar Series

HEC-RAS Webinar Series

- **Hydraulic Principles and Applications**
Tues., October 29, 2019, 11:00 AM - 1:00 PM CDT
- **Working with the HEC-RAS User Interface**
Tues., October 29, 2019, 1:30 - 3:00 PM CDT
- **Water Surface Profiling**
Thurs., October 31, 2019, 11:00 AM - 1:00 PM CDT
- **Steady Flow Surface Profile Demonstrations**
Thurs., October 31, 2019, 1:30 - 3:30 PM CDT

Tree Preservation

- **Concrete and Pavement Design Principles**
Wed., October 30, 2019, 11:00 AM - 12:00 PM CDT
- **Exterior Concrete Pavement Design**
Wed., October 30, 2019, 12:30 - 3:15 PM CDT
- **Interior Concrete Slabs-on-Ground Design**
Thurs., October 31, 2019, 11:00 AM - 1:00 PM CDT
- **Concrete and Pavement Maintenance and Sustainability**
Thurs., October 31, 2019, 1:30 - 3:00 PM CDT

Distributed Batteries for Solar PV Systems

- **Distributed Batteries for Solar PV Systems, Part I**
Wed., November 6, 2019, 11:00 AM - 2:15 PM CST
- **Distributed Batteries for Solar PV Systems, Part II**
Thurs., November 7, 2019, 11:00 AM - 2:15 PM CST

Complying with ADA Standards for Accessible Design

- **Complying with State & Federal Accessibility Requirements**
Thurs., November 7, 2019, 11:00 AM - 1:30 PM CST
- **Applying the 2010 & A117.1 Accessibility Standards**
Fri., November 8, 2019, 11:00 AM - 1:30 PM CST

Structural Forensic Engineering

- **Introduction to the Forensic Engineering Process**
Tues., November 12, 2019, 11:00 AM - 1:00 PM CST
- **Causes of Failures and the Forensic Engineering Report**
Tues., November 12, 2019, 1:30 - 3:30 PM CST
- **Forensic Examination of Structures and Use in Litigation**
Wed., November 13, 2019, 11:00 AM - 1:00 PM CST

For more information visit:
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Registration

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