**Agenda**

**Development of Onsite Wastewater Treatment Technologies**  
S. Heger  
- Overview of decentralized wastewater treatment  
- Residential and commercial  
- Technology and operation of conventional wastewater treatment systems  
- Key contaminant removal

**Iowa and Illinois Specific Regulations and Requirements**  
C. Cluskey  
- Licensing  
- State and local permitting  
- Allowable technologies – sizing and credits  
- Management  
- Local resources

**Evaluating Sites, Setting Treatment Goals and System Design**  
S. Heger  
- Factors for selecting and sizing systems  
- Site and soil evaluation  
- System boundaries and loadings  
- Soil treatment system design basics  
- Pump sizing

**Alternative and Sustainable Treatment Technologies**  
A. Blodig  
- Aerobic treatment units  
- Media filters  
- Drip dispersal

**Management Programs for Onsite Wastewater Treatment Systems**  
S. Heger  
- Management plans  
- Maintenance of systems  
- Inspection and troubleshooting procedures

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**Learning Objectives**

**You’ll be able to:**

**Explain** the basic functions and processes of conventional on-site sewage systems, and identify recent developments in technology and regulation.  
**Identify** the factors to consider when selecting septic system sites and system components.  
**Get** tips on conventional septic system design.  
**Describe** alternative treatment technologies, including aerobic treatment units, media filters and drip dispersal.  
**Develop** management programs for onsite wastewater treatment systems.

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**Septic System Overview - Design and Management**  
Davenport, IA - Tuesday, April 14, 2020

**Examine** onsite wastewater treatment technologies and regulations  
**Explore** factors for selecting and sizing systems  
**Examine** alternative and sustainable treatment technologies  
**Discuss** Iowa and Illinois specific septic regulations and requirements  
**Review** maintenance, inspection and troubleshooting procedures

**Continuing Education Credits**

**Professional Engineers**  
6.0 PDHs

**Architects**  
6.0 HSW CEHs  
6.0 AIA LU|HSW

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Can’t Attend? Order the Manual and the Audio from the Live Seminar as a Self-Study Package!  
Audio recordings of this seminar are available for purchase starting at $279. 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.
Allison Blodig, REHS has been in the onsite wastewater treatment industry since 1997 and has worked most of her career in the wastewater treatment manufacturing industry. Ms. Blodig had her own consulting company for three years, specializing in decentralized wastewater treatment systems. She is also the chair of the Minnesota State Advisory Committee on Decentralized Systems. Dr. Heger has been in the onsite wastewater treatment industry since 1997 and has worked most of her career in the wastewater treatment manufacturing industry. Ms. Blodig had her own consulting company for three years, specializing in decentralized wastewater regulatory consulting, market research, and training across the US. Currently she is an engineer, researcher and instructor in the Onsite Sewage Treatment Program in the Water Resources Center and is an adjunct assistant professor in the Bioproducts and Biosystems Engineering Department at the University of Minnesota. For over 20 years, she has been conducting research and providing education and technical assistance to homeowners, small communities, onsite professionals and local units of government regarding onsite wastewater treatment. Dr. Heger has presented in over 30 states and provinces regarding the design, installation and management of septic systems and related research. She is president-elect of the National Onsite Wastewater Recycling Association and the education chair of the Minnesota Onsite Wastewater Association. Dr. Heger serves on the NSF International Committee on Wastewater Treatment Systems. She is also the chair of the Minnesota State Advisory Committee on Decentralized Systems. Dr. Heger has BS degree in Biosysmes & Agricultural Engineering and MS and PhD degrees in Water Resource Science.

Curts Cluckey has worked in the onsite wastewater industry as a representative of manufactured products for over 19 years. He has experience ranging from wastewater treatment systems to drain fields. Currently, Mr. Cluckey works for Infiltrator Water Technologies as an area sales representative in a multi-state territory in the Midwest. He has provided training at numerous seminars covering many facets of the wastewater industry including installation, sizing, and design. Mr. Cluckey served on the Missouri Small Flows Board from 2006 to 2012. He currently sits on the Onsite Wastewater Professionals of Illinois Board and has since 2016.

Additional Learning

Webinar Series

Foundation Damage and Repair
- Design & Geo-Environmental Loading, Building Codes, Soil Properties
  Wed., March 4, 2020, 11:00 AM - 12:30 PM CST
- Foundation-Slab Wall Design and Construction
  Wed., March 4, 2020, 1:00 - 2:30 PM CST
- Evaluation of Foundation-Slab Damage and Repair Alternatives
  Thurs., March 5, 2020, 11:00 AM - 12:30 PM CST
- Evaluation of Foundation Wall Damage and Repair Alternatives
  Thurs., March 5, 2020, 1:00 - 2:30 PM CST

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Tuition

- ( ) I will be attending the live seminar. Single Registrant - $299.00. Three or more registrants from the same company registering at the same time - $279.00 each.
- ( ) I am not attending. Please send me the self-study package: Downloadable MP3 Audio/PDF Manual for $279.00 CD/Manual Package for $299.00 USB/Manual Package $299.00 (S&H included. Please allow five weeks from seminar date for delivery)

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