Agenda

Presented by John R. Buchanan, PhD, PE

Overview of Individual Onsite and

Decentralized Wastewater Management Systems

Discussion of individual onsite wastewater treatment systems Introduction to decentralized cluster and small community wastewater management systems

Regulation of Individual Onsite and Decentralized Wastewater Treatment Systems

- Chapter 0400-48-01 Regulations to Govern Subsurface Sewage Disposal Systems in Tennessee
- Local jurisdictions that have authority to regulate onsite systems in Tennessee Decentralized wastewater management system regulations Chapters 15 and 17 of the Design Criteria for Sewage Works Permit requirements and procedures

Site Evaluations and Performance Standards

- System boundaries and loadings Analyzing the receiving environment Evaluating landscape and soil types
- Nitrogen and pathogen removal
- Treatment/removal of phosphorus and other pollutants
- Mapping the site

Individual Onsite Treatment System Selection and Design

- Pretreatment using septic tanks
- Advanced pretreatment with aerobic devices
- Aerobic treatment systems
- Peat biofilter wastewater treatment systems
- Trickling filters
- Sequencing batch reactors
- Enhanced nutrient removal
- Final treatment and soil dispersal systems

Decentralized Cluster System Wastewater Treatment and Dispersal Technologies

Recirculating media filters Drip dispersal wastewater disposal systems

Management Program for Onsite Wastewater Treatment Systems

Review of EPA's five levels of decentralized wastewater management Operation and maintenance service providers Inspection procedures

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2023 Systems 21, August ecentralized Treatment Monday, Webinar Wastewater Tennessee Interactive Live,



You'll be able to:

Comply with regulations for decentralized cluster and small community wastewater management systems.

Explore regulation of individual onsite wastewater treatment systems.

Review permit requirements and procedures.

Learn about nitrogen and pathogen removal, and explore removal of phosphorus and other pollutants.

Compare different types of systems, including aerobic treatment systems, peat biofilters, sequencing batch reactors and enhanced nutrient removal.

Set up programs to inspect and manage onsite wastewater systems.



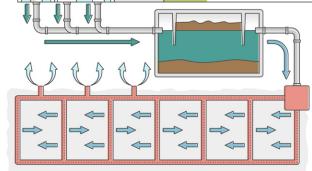
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Tennessee **Decentralized Wastewater Treatment Systems**





Comply with regulations for decentralized cluster and small community wastewater management systems

Explore regulation of individual onsite wastewater treatment systems

Continuing Education Credits

Professional Engineers 6.5 PDHs

Architects 6.5 HSW CE Hours 6.5 AIA LU|HSW





HalfMoon Education Live Webinars

Live, Interactive Webinar - Monday, August 21, 2023

Learn which local jurisdictions have authority to regulate systems

Evaluate sites and examine wastewater receiving environments

Select, design and install individual onsite treatment systems

International Code Council .65 CEUs (Building)





Faculty

John Buchanan, **PhD**, **PE** is an associate professor in the Department of Biosystems Engineering and Soil Science Department at the University of Tennessee where he is also the director of the Construction Science and Management Program. His experience includes teaching, research, and extension work in the areas of soil erosion prevention, sediment control, water quality, and agricultural waste management. He is past president of the Tennessee chapter of the Soil and Water Conservation Society and has served on the board of the Tennessee Onsite Wastewater Association (TOWA). Dr. Buchanan is active as a speaker at seminars, workshops, and conferences both regionally and nationally on the subject of onsite wastewater and is a registered professional engineer in Tennessee.

Webinar Information

Log into Webinar 7:30 - 8:00 am CDT

Break 11:30 am - 12:30 pm CDT

Morning Session 8:00 - 11:30 am CDT Afternoon Session 12:30 - 4:00 pm CDT

Tuition

\$319 for individual registration

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Credit Information

This webinar is open to the public and is designed to qualify for 6.5 PDHs for professional engineers and 6.5 HSW continuing education hours for licensed architects in Tennessee. The Tennessee Board of Architectural and Engineering Examiners does not pre-approve continuing education courses.

Professionals seeking continuing education credit in other states may be able to claim the hours earned at this webinar. Refer to specific state rules to determine eligibility.

The American Institute of Architects Continuing Education System has approved this course for 6.5 HSW LUs (Sponsor No. 1885). Only full participation is reportable to the AIA/CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Building (Preferred Provider No. 1232).

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the guiz that follows the course (multiple attempts allowed).

On-Demand Credits

The following pre-approvals may be available for the on-demand format upon request: 6.5 HSW LUs (AIA)

Additional Learning

Design, Ecology and Maintenance of Ponds - Thursday, July 20, 2023 | 8:30 am - 3:30 pm CDT

Avoiding, Identifying and Resolving Ethical Issues in Land and Water Transactions - Friday, July 21, 2023 | 2:00 - 3:00 CDT

Soil-Structure Interaction (SSI) - Tuesday, July 25, 2023 | 9:00 am - 4:00 pm CDT

Seismic Design and Construction - Thursday, July 27, 2023 | 8:30 am - 5:00 pm CDT

The Usefulness of Drones for **Civil Engineers and Land Surveyors** - Thursday, July 27, 2023 | 9:00 am - 4:00 pm CDT

Managing Construction Projects - Monday, July 31, 2023 | 9:00 am - 5:00 pm CDT

Pruniversity: The Short Course on Pruning and Training Trees - Monday, July 31, 2023 | 9:00 am - 4:30 pm CDT

Concrete Pavement Design, **Construction and Maintenance** - Tuesday, August 1, 2023 | 9:00 am - 4:30 pm CDT

Complying with NPDES

Industrial Stormwater Requirements - Wednesday, August 2, 2023 | 8:30 - 11:45 am CDT - Thursday, August 3, 2023 | 8:30 - 11:45 am CDT

Deep Dive into Pests and Diseases of Trees

- Wednesday, August 2, 2023 | 1:00 - 3:00 pm CDT

PFAS Remediation in City Water Supplies - Wednesday, August 2, 2023 | 1:00 - 4:00 pm CDT

Introduction to Groundwater Hydrology - Tuesday, August 8, 2023 | 9:00 am - 12:15 pm CDT - Wednesday, August 9, 2023 | 9:00 am - 12:15 pm CDT

Tiny House Design and Construction - Wednesday, August 9, 2023 | 9:00 am - 5:15 pm CDT

Technical Writing Workshop for Design Professionals - Friday, August 11, 2023 | 7:30 am - 4:00 pm CDT

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