Agenda

Presented by Tom Fritts

Introduction to Onsite Wastewater Treatment Systems

Three main sources of wastewater Common contaminants in wastewater Blackwater vs greywater Aerobic and anaerobic conditions Federal, state and local regulations Current state and future of onsite wastewater

Septic Tanks

Function of septic tanks Septic tank appurtenances Material and quality of tanks

Soil and Site Evaluation

Soil classification Landscape position Long tewarm acceptance rate (LTAR) of soil Linear loading rate (LLR) of soil

Aerobic Treatment Units (ATU)

History of residential ATU's How residential ATU's function Hydraulic and organic sizing Different types of ATU's

Choosing the Correct System to Fit the Site

Review gravity flow options Review pressure flow options Educate the customer Learn the "Onsite Café Menu"

Wastewater Drip Irrigation

History of drip irrigation Drip irrigation benefits Components Sizing a drip irrigation system

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System Design **Wastewater Collection Treatment** and

- Monday, November 16, ive, Interactive Webinar

2020

HalfMoon PO Box 27 Altoona, W

Learning Objectives

You'll be able to:

Identify the three primary sources of wastewater and discuss common contaminants in wastewater.

Describe how septic tanks function, identify septic tank appurtenances, and evaluate the quality of tanks.

Explain the reasons for conducting soil and site evaluations before siting and selecting onsite treatment systems.

Explore the function and benefits of residential aerobic treatment units (ATU's), and compare different types of ATU's.

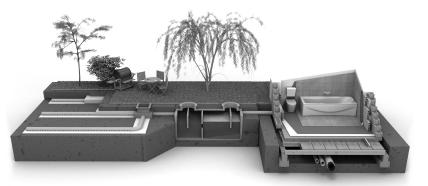
Identify the benefits of wastewater drip irrigation, and get tips on sizing drip irrigation systems.



HalfMoon Education Online Learning

Wastewater Collection and Treatment System Design

Live, Interactive Webinar - Monday, November 16, 2020



Explore federal, state and local regulations of wastewater treatment systems.

Examine the current state and the future of onsite wastewater.

Assess the function of septic tanks and discuss the importance of the quality of tanks.

Evaluate the soil, the site and landscape position of a wastewater treatment system.

Learn how aerobic treatment and subsurface drip irrigation systems

Learn to size a drip irrigation system.

Continuing Education Credits

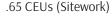
Professional Engineers

6.5 PDHs

Architects 6.5 HSW CE Hours AIA

6.5 LU|HSW

International Code Council









Faculty

Tom Fritts Vice President Residential Sewage Treatment Company (RSTC)

Mr. Fritts is vice-president of Residential Sewage Treatment Company, Inc., in Grandview, Missouri, where they design, sell and service alternative onsite wastewater systems. He is past president of the Missouri Smallflows Organization (MSO), the Kansas Small Flows Association (KSFA) and the National Onsite Wastewater Recycling Association (NOWRA). He is an approved instructor for NOWRA, the Consortium of Institutes for Decentralized Wastewater Treatment, and for several states across the country. Mr. Fritts is the 2016 recipient of the NOWRA "Dick Otis Industry Achievement Award" and the 2015 Kansas Small Flows Association "Raymond Peat Industry Achievement Award."

Webinar Information

Log into Webinar

8:00 - 8:30 am CST 12:00 - 1:00 pm CST

Morning Session Afternoon Session 8:30 am - 12:00 pm CST 1:00 - 4:30 pm CST

Tuition

\$299 for individual registration

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Additional Learning

Soils in Construction

- Tues., October 20, 2020 | 11:00 am 3:00 pm CDT
- Wed., October 21, 2020 | 11:00 am 3:00 pm CDT

Designing for Accessibility under ADA Standards and IBC

- Wed., October 21, 2020 | 8:30 am - 4:30 pm CDT

Stormwater Best Management Practices

- Wed., October 21, 2020 | 8:30 am - 5:00 pm CDT

2018 International Residential Code: Non-Structural Design

- Fri., October 23, 2020 | 11:00 am - 3:30 pm CDT

How to Navigate the New Federal Navigable Waters Protection Rule

- Fri., October 23, 2020 | 12:00 - 2:00 pm CDT

How to Navigate the New Federal **Navigable Waters Protection Rule**

- Fri., October 23, 2020 | 12:00 - 2:00 pm CDT

International Building Code 2018

- Mon., October 26, 2020 | 9:00 am - 5:30 pm CDT

Passive House: Planning and Design

- Tues., October 27, 2020 | 8:30 am - 4:30 pm CDT

Aerial Mapping: Technologies and Procedure

- Tues., October 27, 2020 | 8:30 am 12:00 pm CDT
- Wed., October 28, 2020 | 8:30 am 12:15 pm CDT

Introduction to the International **Green Construction Code (IgCC)**

- Wed., October 28, 2020 | 11:00 am 2:15 pm CDT
- Thurs., October 29, 2020 | 11:00 am 2:15 pm CDT

Special Inspections under the 2018 International Building Code Chapter 17

- Thurs., October 29, 2020 | 9:30 am - 4:20 pm CDT

For more information and other online learning opportunities visit: www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This webinar offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours to architects licensed in all states

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina (S-0130), and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 6.5 LU|HSW (Sponsor No. J885). 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 Sitework (Preferred Provider No. 1232).

Completion certificates will be awarded to participants who complete this event and earn a passing score (80%) on the guiz that follows the presentation (multiple attempts allowed).

Registration

Wastewater Collection and Treatment System Design

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Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278 Complete the entire form. Attach duplicates if necessary.		Occupation: Email: Phone: Occupation: Email: Phone: Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.
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Tuition () I will be attending the live webinar. Single Registrant - \$299.00. Three or more registrants from the same company registering at the same time - \$199.00 each. () I am not attending. Please send me the webinar recording: Streamable MP4 Video/PDF Manual for \$279.00. USB Video/PDF Manual for \$279.00.			
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