

Agenda

Introduction/Overview of Onsite Wastewater Treatment Technologies

Technology and operation of conventional wastewater treatment systems
Problems with conventional onsite systems

Definition/Common Terms

Regulation, Permitting and Sustainability of Onsite Wastewater Treatment Systems

Federal, state and local regulation of systems
Coordinating system regulation with surface and groundwater regulations
Treatment of systems under LEED certification systems
Permit requirements and procedures Permitting procedures

Evaluating Sites and Setting Treatment Goals

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

Soils Investigation

Location and number of test holes Logging of soil profile (soil classification)
Groundwater levels and monitor Percolation testing
Practice problems

Estimating Sewage Flows

Residential flows Commercial flows Example problems (three problems)

Conventional Treatment System Selection and Design

Types of wastewater systems Design considerations
System performance Initial system design
Examples (three examples)

Alternative and Sustainable Treatment Technologies

Aerobic treatment systems
Peat biofilter wastewater treatment systems
Drip dispersal wastewater disposal systems Fixed-activated sludge treatment
Recirculating sand filters Trickling filters
Sequencing batch reactors Vegetated submerged beds
Evapotranspiration Enhanced nutrient removal
Stabilization ponds and constructed wetlands

Management Program for Onsite Wastewater

Treatment systems Monitoring of systems
Developing maintenance plans Inspection procedures
Repair options

Septic System Design, Construction and Maintenance in Alaska

Live, Interactive Webinar - Wednesday, October 28, 2020

NON-PROFIT
U.S. POSTAGE PAID
EAU CLAIRE, WI
PERMIT NO. 2016

HalfMoon Education Inc.
PO Box 278
Altoona, WI 54720-0278



Learning Objectives

You'll be able to:

Explore the technology and operation of conventional wastewater treatment systems.

Coordinate septic system regulation with surface and groundwater regulations.

Examine factors for selecting sites and setting treatment goals.

Evaluate landscape and soil types.

Learn to implement maintenance plans for onsite wastewater treatment systems.



Find us on
Facebook

HalfMoon Education Online Learning Septic System Design, Construction and Maintenance in Alaska

Live, Interactive Webinar - Wednesday, October 28, 2020



Get an overview of onsite wastewater treatment technologies

Learn about regulation, permitting and sustainability of onsite systems

Evaluate sites and set treatment goals

Discuss conventional treatment system selection and design

Investigate alternative and sustainable treatment technologies

Set up maintenance and monitoring plans

Continuing Education Credits

Professional Engineers

6.5 PDHs

AIA

6.5 LU|HSW

Architects

6.5 HSW CE Hours

International Code Council

.65 CEUs (Building)



HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG



PREFERRED
EDUCATION
PROVIDER

AIA
Continuing
Education
Provider

Faculty

Steven R. Pannone, Professional Engineer
Principal of Pannone Engineering Services LLC, in Anchorage, AK

Mr. Pannone is a registered civil engineer specializing in the planning, design and construction of sanitation facilities. He is a lifelong Alaskan with more than 30 years of engineering and construction experience. Mr. Pannone's background includes experience in survey, design, construction, testing and monitoring of engineered projects. He has worked all over the state of Alaska, including extensive time in the arctic and remote regions. Mr. Pannone takes a practical approach to design, taking into account who is going to be doing the construction and how it will be done. He has hands-on experience in the construction of water and wastewater systems, buildings and large earth works projects. Mr. Pannone is a certified ADEC water/wastewater designer and sanitary surveyor. He is the founder of Pannone Engineering Services LLC. This privately-owned company was founded in February of 1991. The company has specialized in the design, testing and installation of on-site water and wastewater systems. Pannone Engineering Services (PES) have performed engineering designs, analysis and evaluations of water and wastewater systems throughout Alaska. The types of systems have ranged from small single-family septic systems to large commercial systems serving greater than 100 people daily. PES typically tests between 90 and 150 septic systems a year and designs approximately 50 to 75 new or upgraded systems. PES has an excellent working relationship with the Municipality of Anchorage and the State Department of Environmental Conservation.

Joseph Lawendowski, Civil Engineer
Pannone Engineering Services LLC, in Anchorage, AK

Mr. Lawendowski specializes in residential structural design and water/wastewater systems, and he is a residential building inspector. He is a longtime Alaskan who retired from the military after more than 23 years of service and has more than five years of engineering and construction experience. Mr. Lawendowski's background includes experience in design, construction, testing and monitoring of engineered projects. He has worked all over the state of Alaska, including extensive time in the arctic and remote regions. Mr. Lawendowski takes a practical and economical approach to design, taking into account who is going to be doing the construction and how it will be done. He has hands-on experience in the construction of water and wastewater systems, the construction and renovation of buildings and large earth works projects.

Webinar Information

Log into Webinar 8:00 - 8:30 am ADT	Break 11:55 am - 12:25 pm ADT
Morning Session 8:30 - 11:55 am ADT	Afternoon Session 12:25 - 3:50 pm ADT

Tuition
\$299 for individual registration
\$199 for three or more registrants from the same company at the same time.
Included with your registration: *PDF seminar manual.*

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar. For more information, please visit our FAQ section of our website, or visit www.gotowebinar.com.

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

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. Educators and courses are not subject to preapproval in Alaska

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 .6 CEUs in the specialty area of Building (Preferred Provider No. 1232).

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

Additional Learning

Maintaining Existing Buildings under the 2018 International Fire Code

- Mon., October 5, 2020 | 10:00 am - 2:30 pm CDT
- Mon., October 12, 2020 | 10:00 am - 2:30 pm CDT

Designing for Accessibility under ADA Standards and IBC

- Tuesday, October 6, 2020 | 8:30 am - 12:15 pm CDT
- Wed., October 7, 2020 | 8:30 am - 12:15 pm CDT

Soil Mechanics, Slope Stabilization, Failures & Repairs

- Wed., October 7, 2020 | 8:30 am - 12:00 pm CDT
- Thurs., October 8, 2020 | 8:30 am - 12:00 pm CDT

2018 International Residential Code: Residential Means of Egress

- Fri., October 9, 2020 | 11:00 am - 3:30 pm CDT

Preventing and Addressing Construction Defects and Failures

- Tues., October 13, 2020 | 8:30 am - 5:00 pm CDT

How to Inform Your Design Process Using Passive House

- Tues., October 13, 2020 | 11:00 am - 1:00 pm CDT

Construction Cost Estimating and Value Engineering

- Wed., October 14, 2020 | 8:30 am - 3:20 pm CDT

Structural Steel Design Concepts

- Thurs., October 15, 2020 | 8:00 am - 1:30 pm CDT

Commercial Energy Conservation Code Essentials for Architects

- Fri., October 16, 2020 | 11:00 am - 2:15 pm CDT

How to Navigate the New Federal Navigable Waters Protection Rule

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

How to Design for Wind Loads

- Wed., October 28, 2020 | 6:00 - 8:00 pm CDT

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

Can't Attend?
Order the Webinar as a Self-Study Package!
Recordings of this webinar are available for purchase. 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.

Registration

Septic System Design, Construction and Maintenance in Alaska
Live, Interactive Webinar - Wednesday, October 28, 2020

How to Register	Registrant Information		
Online: www.halfmoonseminars.org	Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____		
Phone: 715-835-5900	Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____		
<table><tr><td>Fax: 715-835-6066</td><td>Code:</td></tr></table>	Fax: 715-835-6066	Code:	
Fax: 715-835-6066	Code:		
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278			
Complete the entire form. Attach duplicates if necessary.	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.		
() I need special accommodations. Please contact me.			

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**.

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: _____