

"Professionals working together to protect Pennsylvania's environment"

**Attendee Registration Brochure** 



# 2025 Onsite Wastewater SUPER Conference of Pennsylvania

February 2-4, 2025



Penn Harris Hotel & Convention Center 1150 Camp Hill Bypass, Camp Hill, PA 17011

TWO STATEWIDE CONFERENCES IN ONE brought to you by:







The PA Septage Management Association (**PSMA**) will be joining with the PA Association of Sewage Enforcement Officers (**PASEO**) to offer a joint conference & trade show on **Feb 2-4**.

2025 in Camp Hill, PA (new venue)!

The Onsite Wastewater SUPER

Conference of Pennsylvania will

offer an expanded list of educational

opportunities for wastewater

professionals to attend. We are

anticipating 300 attendees from the

regulatory, design, pumping, inspection, installation, manufacturing, and service/ maintenance communities.

We have also expanded our Exhibit Hall to include accomodate over **35 onsite wastewater vendors** who can help futher educate you about their products & services. We hope you can join us for this **SUPER** event!

### JOIN FELLOW PROFESSIONALS!

Don't miss the 2025 Onsite Wastewater SUPER Conference & Trade Show! PASEO & PSMA have combined **TWO STATEWIDE CONFERENCES** into one! The SUPER conference is being held February 2-4, 2025, at the Penn Harris Hotel, Camp Hill, PA. This statewide event will provide a very special opportunity to learn from experts in the industry & network with your colleagues.

Sunday, February 2nd – Optional Training:9:00 a.m. – 4:30 p.m.Sunday, February 2nd – Welcome Reception:6:00 p.m. – 8:00 p.m.Monday, February 3rd – Conference Activities:8:00 a.m. – 8:00 p.m.Tuesday, February 4th – Conference Activities:7:00 a.m. – 4:00 p.m.

### **TRAINING & EDUCATION**

Attendees can participate in an expanded offering of educational opportunities. There are optional Add-On training courses on Sun for those who want an extra dose of education. The main conference has **SIX EDUCATIONAL TRACKS** planned on Mon & Tue which consist of onsite wastewater breakout sessions suitable for both SEOs and contractors as well as training courses, including the 2-day Installation of Onsite Wastewater Treatement Systems. (Additional fees apply for training course attendance.)

### **REGISTER TODAY BY PAPER OR ONLINE**

To register for the SUPER conference, complete & return the enclosed registration form. Or, you can quickly register online (pay by credit card or check) at **www.PASuperConference.org. Early bird discount deadline is Jan 18th. Registration closes on Jan 30th.** Cancellations must be made, in writing, by Jan 24 to receive a refund, less a \$50 administrative fee. Registrations are processed by PSMA.

### **CONTINUING EDUCATION**

Continuing education credits are available for both SEOs and PSMA SR I Inspectors. PASEO has applied to PA DEP for approval of up to 4 SEO continuing education credits for qualified conference breakout sessions. If approved, one SEO credit is awarded per half day attended. Training courses are approved for either 3 credits (half day), 6 credits (full day), or I 2 credits (Installation Course). See course descriptions for more info.

PSMA SR1 inspectors will recieve one continuing education credit for each qualified break-out session attended. A maximum of 8 PSMA SR1 credits can be earned from conference breakout sessions. Training course CE credit is awarded at the same rate as SEO credits.

### **QUESTIONS?**

Contact PASEO at admin@pa-seo.org or PSMA at director@psma.net.

### LODGING INFORMATION

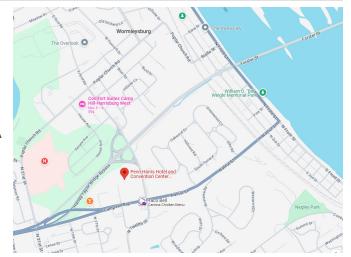
Penn Harris Hotel & Convention Center

1150 Camp Hill Bypass Camp Hill, PA 17011 (717) 763-7117 www.pennharrishotel.com



Located right off Highway 15, Penn Harris Hotel in Camp Hill, PA provides proximity to Harrisburgh's downtown just across the Susquehanna River.

Room Block: 2025 Onsite Wastewater Super Conference of PA Rate: \$109 per night plus tax. **Deadline to receive hotel** group rate: January 18, 2025



To book your room, please call the hotel at (717) 763-7117. Be sure to mention the group block to receive the discounted rate. Hotel check-in: 3:00pm. Hotel check-out: 11:00am.

If you're flying into Harrisburg International Airport (MDT), you can take advantage of the hotel shuttle to/from the airport.



### SCHEDULE OF EVENTS Subject to Change

### Sunday, February 2nd

9:00am - 4:30pm	<b>Optional Training Courses for Attendees</b> Full day courses: 9am-4:30pm Half day courses: 9am-12:30pm & 1pm-4:30pm
4:30pm - 6:00pm	Board of Directors Meetings
6:00pm - 8:00pm	Welcome Reception with Exhibitors

### Monday, February 3rd

8:00am - 9:00am	Attendee Registration Open
8:00am - 9:00am	Hot Breakfast Buffet in Exhibit Hall
8:00am - 6:00pm	Exhibit Hall Open
9:00am - 12:00pm	Morning Educational Sessions
12:00pm - 1:30pm	Buffet Lunch
l:30pm - 4:30pm	Afternoon Educational Sessions
4:30pm - 6:00pm	Happy Hour Mixer in Exhibit Hall
6:00pm - 8:00pm	Buffet Dinner & Live Entertainment

### **Tuesday, February 4th**

7:00am - 8:00am	Attendee Registration Open
7:00am - 8:00am	Hot Breakfast Buffet in Exhibit Hall
7:00am - 1:00pm	Exhibit Hall Open
8:00am - 11:00am	Morning Educational Sessions
11:00am - 12:00pm	PASEO/PSMA Regional Meetings
l 2:00pm - l :00pm	Buffet Lunch
l:00pm - 4:00pm	Closing Plenary Educational Sessions
4:00pm	Conference Closes



EARLY BIRD DISCOUNT ENDS ON JANUARY 18, 2025

REGISTRATION CLOSES ON JANUARY 30, 2025

Sign up today at: www.PASuperConference.org

#### Sunday, February 2, 2025

#### Troubleshooting Onlot Systems Training Course

(full day – 9:00am-4:30pm) DEP Training Course #1002.01INVT-0087CLRM; 6 SEO CEUs Instructors: Jeff Winkle, Middlesex Township & Charlie Barkman, PennsylvaniaSeptic

**Description:** This full day course will walk students through the process of investigating a potential malfunction up to the point of identifying the underlying cause(s). There will be a brief discussion on how to resolve common types of malfunctions in general terms but will not focus on resolving malfunctions; in any detail. Topics addressed include: Unresolved Regulatory Malfunctions; Basic Investigation; Background Investigation; Technical Investigations (Building Sewers, Treatment, Distribution, Absorption Area).

#### Sewage Facilities Planning Training Course

(half day – 9:00am-12:30pm)

DEP Training Course #1002PLAN-0087CLRM, 3 SEO CEUs Instructor: Roger Lehmann, All County and Associates

**Description:** The primary purpose of sewage facilities planning is to protect public health, safety, and welfare. An SEO's main responsibility in planning is to determine if the site is generally suitable for on lot sewage disposal systems. This course will help students become knowledgeable about the purposes of sewage facilities planning and gain a better understanding of the planning process of a local agency. The course will serve as a primer on what a planning module is and what the various modules do. Students will come away with a better understanding of reviewing planning modules.

### **Effluent Pump Sizing & Selection Training Course** (half day – 1:00pm-4:30pm)

(nai) day – 1:00pm-4:30pm) DEP Training Course #1007HYDR-0087CLRM, 3 SEO CEUs Instructor: Adam Browning, Penn's Trail Environmental Description: Effluent pumps are an essential part of any pressure distribution system. This course will discuss pressure distribution as produced by a mechanical pump. In addition to various pump characteristics, students will learn how to estimate the friction loss in a piping system and how to calculate the size of pump needed for a pressure dosed system. The correct use of pump curves will be covered as well as how to properly calculate the correct volume of a dose.

#### Confined Space Entry: Safety Protocols and Best Practices Training Course

#### (full day – 9:00am-4:30pm)

Instructor: Jeff Rachlin, OnSite Management

**Description:** This full-day training will focus on the essential safety protocols and regulatory requirements for confined space entry within the onsite wastewater treatment industry. Working in confined spaces, such as septic tanks, pump chambers, and holding tanks, poses significant risks, including toxic atmospheres, limited oxygen, and physical hazards. Proper training and preparation are critical to ensuring the safety of all personnel involved. Topics will include identifying confined spaces, understanding the hazards associated with each type of entry, and implementing safety measures such as atmospheric testing, ventilation, and the use of personal protective equipment (PPE). We'll also cover OSHA standards for confined space entry, the roles of personnel (entrant, attendant, and supervisor), and the importance of an emergency response plan. Real-world case studies will highlight the consequences of inadequate safety measures and the benefits of rigorous protocols. This presentation provides the tools and knowledge necessary to conduct safe, compliant confined space entries in septic system work. Attendees will leave with a clear understanding of the risks involved, the regulatory requirements, and best practices for maintaining a safe work environment when entering confined spaces. 6 PSMA SRI CEUs. 2 SEO CEUs.

#### Series of O&M Classes Training Course

(full day - 9:00am-4:30pm)

DEP Training Courses Approved for a Combined Total of 6 SEO CEUs. Instructors: Charlie Barkman, PennsylvaniaSeptic; Brent Hershey, Tri-County Water Services; & Ed Schloss, JET Inc. **Description:** The importance of system maintenance cannot be overstated and is the key to long term system functioning. This full day of training includes four 90-minute classes:

- System Operation and Maintenance- It's More Than Just Tank Pumping (#1003SMGT-0087CLRM)
- Maintaining a Residential Jet BAT Media Plant (#1012TECH-0087CLRM)
- Advantex® Treatment Systems in PA- Maintenance Provisions for the SEO (#1010TECH-0087CLRM)
- PercRIte® Drip Dispersal- Operation and Maintenance (#1011TECH-0087CLRM)

#### Monday, February 3, 2025

#### Opening Session: Environmental Protection in Penna

**Presenters:** Jessica Shirley, Acting Secretary for the PA Department of Environmental Protection; Faith Kibuye, Penn State Extension **Description:** The Acting DEP Secretary has been invited (unconfirmed) to provide an overview of the Department's environmental priorities for Pennsylvania with a special focus on clean water initiatives. Following the Secretary's remarks, representatives from the Penn State Extension will provide a summary of a recent statewide research effort addressing onsite wastewater systems.

### Installation of Onsite Wastewater Systems Training Course (2 days – M 9am-5pm & T 8am-4pm)

DEP Training Course #1001INST-0001CLRM, 12 SEO CEUs Instructors: Roger Lehmann & Travis Haber, All County and Associates; Charlie Barkman, PennsylvaniaSeptic; and Jeff Rachlin, OnSite Management Description: The PASEO/PSMA Installation of Onlot Wastewater Systems training course is being offered concurrently during the conference on Monday & Tuesday. If you opt to register for this training course, you will attend the two-day course instead of the various other breakout sessions. However, training course participants can take part in all of the conference breaks, meals, and networking opportunities. This course will educate installers in proper design and installation of septic systems so that systems operate effectively upon startup and are accessible for regular service over the life of the system. Topics covered will include: Industry Integrity, Installation Safety, Soils and Site Evaluation, Materials and Techniques, Installation Planning, Distribution Pressure and Gravity Systems, Tanks, Installation Piping, and Pumps & Controls. Successful completion will result in the individual being listed on DEP's website as having completed the installation course.

#### National Vacuum Truck Technician Training Course (full day – 10:30am-5:00pm)

#### Instructor: Jeff Rachlin, On Site Management

**Description:** If you own or operate a vacuum truck to clean septic tanks, aerobic Treatment units, holding tanks or grease traps, this oneday in-person training session is for you or your employees. Topics of instruction include: Truck equipment and components; Drive and control mechanisms; Basic pump truck operation; Pumps; Basic science of vacuum and pressurization; Basic and Advanced pump out skills and procedures; Materials to pump and avoid; Loading and unloading; Reasons to manage these materials; Manifests and reports; Government regulations; Safety, Spills and Emergency Response plans; Customer interaction and education. Individuals who complete the course work and achieve a passing grade on the exam administered at the conclusion of training become PSMA Certified Vacuum Truck Technicians. 6 PMSA SR I CEUs. 2 SEO CEUs.

#### Using Controlled Fill with Septic Systems

Presenter: Steve Dadio, Rooted Environmental

**Description:** In this presentation, we will explore the role of controlled fill in designing and constructing effective onsite wastewater treatment systems. This session will cover the basics of controlled fill—its composition, engineering considerations, and the importance of soil structure in septic system efficiency. We'll dive into the types of fill materials available, their proper application techniques, and best practices to maintain optimal permeability and system longevity. Additionally, we'll

examine how controlled fill mitigates issues like high groundwater levels, bedrock interference, and poor native soils. Attendees will come away with a deeper understanding of controlled fill's environmental impact, cost benefits, and the potential for increased system lifespan, as well as potential pitfalls of integrating this technique in their own projects. This presentation is ideal for professionals looking to enhance their knowledge of septic system construction and for those interested in sustainable, adaptable solutions in the onsite wastewater treatment industry.

#### **Reviewing PercRite Drip Dispersal System Designs Presenter:** Bryan Allen, American Manufacturing Co.

Description: This presentation will delve into the essentials of designing and reviewing designs of PercRite drip dispersal systems for onsite wastewater treatment. Drip dispersal systems offer an efficient, low-impact method for wastewater disposal, making them particularly advantageous for challenging site conditions and environmentally sensitive areas. During this session, we will review key design principles of drip dispersal, including site assessment, system layout, and the selection of dripline components. Participants will gain insights into regulatory requirements and guidelines for drip dispersal systems, with a focus on meeting compliance standards and addressing common issues encountered during inspection. We will illustrate the benefits of drip dispersal systems in protecting water quality and enhancing system resilience under variable environmental conditions. This presentation is designed for onlot wastewater treatment professionals and regulators looking to deepen their understanding of drip dispersal technology, optimize system performance, and uphold regulatory standards in the design and maintenance of these systems. Attendees will leave with practical knowledge and tools to effectively evaluate and understand the approval process of drip dispersal system designs.

#### **Commercial Systems: Inspectors Roundtable**

**Presenters:** Ray Erb, Thomas H. Erb & Sons, Inc. & other panelists **Description:** Join us for an interactive roundtable discussion focused on the unique challenges and best practices involved in inspecting commercial onsite wastewater treatment systems. Commercial systems, often more complex than residential ones, require a specialized understanding of design standards, hydraulic load variations, and advanced treatment technologies to ensure compliance and operational efficiency. In this session, we will share experiences and insights from the field, addressing critical inspection aspects like flow assessments, system sizing, grease and solids management, and advanced pretreatment units. We'll also explore troubleshooting techniques, common pitfalls in commercial system inspections. This roundtable is an opportunity for inspectors to bring forward their questions, share expertise, and collaborate on solutions to the unique challenges posed by commercial systems. Whether you're a seasoned professional or new to the field, this discussion will provide practical insights to enhance your inspection process, promote system sustainability, and support public health and environmental protection through rigorous commercial system evaluation.

#### Control Panels: Advances in Design & Troubleshooting Presenter: Jim Felker, SJE Rhombus

**Description:** This session will focus on controlling pumps with new advances in control panel functionality for septic system design. Today's panels include enhanced diagnostic capability for system trouble shooting, as well as system monitoring. The class will offer discussion of installation tips and common errors to avoid.

### Beyond Planning Modules: Properly Completing Other Necessary Forms

**Presenters:** Ryan Oxenford & Nic Krebs, Chester County Health Department **Description:** This presentation will guide onsite wastewater treatment professionals and regulators through the process of accurately completing the various forms required beyond the initial planning module. While the planning module addresses key project aspects, other forms play a critical role in ensuring that the design, construction, and operation of onlot systems meet all regulatory and compliance standards. We'll review the purpose and requirements of common forms, including system permit applications, soil testing reports, design submissions, and postconstruction inspection forms. Ideal for professionals and regulators involved in permitting and oversight, this session will enhance participants' understanding of the paperwork essential for regulatory approval.

#### Performing PercTests: Techniques, Accuracy, & Best Practices Presenter: Roger Lehmann, All County and Associates

**Description:** This presentation provides a comprehensive overview of percolation (perc) testing, an essential step in evaluating site suitability for onsite wastewater treatment systems. Perc tests are critical for determining soil absorption rates, which influence system design, sizing, and placement. This session will cover the complete perc test process, from pre-test site evaluation and soil preparation to measurement techniques and interpreting results accurately. We will review best practices for ensuring test accuracy, common mistakes to avoid, and ways to document findings to meet regulatory requirements. Emphasis will be placed on adapting testing techniques to different soil types, identifying red flags, and troubleshooting challenges such as groundwater interference or soil variability. Participants will also gain insights into how perc test data integrates with soil profile analyses to inform overall system design. Geared toward both professionals and regulators, this presentation is ideal for those seeking to improve their perc testing skills, ensure compliance with state and local guidelines, and contribute to more effective and sustainable onsite system installations. Attendees will leave with a clear understanding of perc testing fundamentals and advanced tips for accurate, reliable results.

### Fundamentals of System Design: Key Principles, Standards, and Best Practices

Presenter: Adam Browning, Penn's Trail Environmental **Description:** This presentation will focus on the foundational elements of onsite wastewater treatment system design specific to Pennsylvania's regulatory landscape. From soil testing to hydraulic loading rates, we'll examine the essential principles and standards that form the basis for designing effective, code-compliant systems across diverse site conditions. Topics covered will include the types of systems commonly used in Pennsylvania, criteria for selecting appropriate systems, and the importance of soil and site evaluations. Attendees will learn best practices for component sizing, layout configurations, and ensuring system longevity while protecting environmental and public health. We'll also address the specific state requirements and forms necessary to move a project from planning to approval. This presentation is ideal for professionals seeking to deepen their knowledge of PA-specific design protocols, streamline their design process, and improve their projects' regulatory approval success. Participants will leave equipped with practical insights and strategies to enhance their design practices and deliver effective, sustainable solutions tailored to Pennsylvania's unique landscape and regulatory framework.

#### Cost Analysis & Pricing Strategies for Your Business: Maximizing Profitability & Sustainability Presenter: PA SBDC

**Description:** In this presentation, we will dive into the essential financial aspects of running a successful small business in the onsite wastewater treatment industry. Effective cost analysis and strategic pricing are crucial to ensuring profitability, growth, and long-term sustainability. We'll cover the basics of cost calculation, including fixed and variable expenses, labor costs, equipment depreciation, and project-specific expenditures that impact your bottom line. Participants will learn how to set profitable yet competitive pricing by evaluating factors such as market demand, service differentiation, and customer expectations. We'll also discuss strategies for managing cash flow, building an adaptable pricing model, and implementing value-based pricing for specialized services. Ideal for small business owners and operators in the septic system field, this session provides the tools and insights needed to confidently analyze costs, set prices, and ultimately boost the financial health of your business. The presentation will also include an overview of the SBDC's Environmental Management Assistance Program (EMAP) assists Pennsylvania's small business community with understanding and complying with regulatory requirements. Attendees will leave equipped with actionable strategies to refine their pricing approach, enhance customer satisfaction, and maximize profitability in a competitive market.

#### **Best Practices for Locating Soil Testing Sites**

**Presenter:** Randy Rosbach & Robert Bressler, Soil Services Company **Description:** This presentation will cover the critical process of selecting and locating soil testing sites to support reliable and effective onsite wastewater treatment system design. Proper site selection is essential to accurately assess soil suitability, which directly impacts system performance, environmental protection, and regulatory compliance. Attendees will learn best practices for identifying optimal test locations, taking into account factors such as landscape position, soil horizons, drainage patterns, and proximity to limiting layers. We'll discuss techniques for evaluating various site conditions, including slope, groundwater levels, and vegetation, that signal potential soil variability or challenges. Designed for both professionals and regulators, this session offers practical guidance on maximizing testing accuracy and efficiency to ensure that system designs align with site-specific soil conditions. Participants will leave with actionable insights to improve their soil testing processes, minimize installation risks, and contribute to sustainable, effective wastewater treatment system solutions.

#### **Regulatory Inspections & Septic System Installations**

**Presenter:** Joseph L. Linderman, Delaware County Health Department Description: This presentation will focus on the intersection of regulatory inspections and septic system installations, providing valuable insights into ensuring compliance and quality control throughout the installation process. Regulatory inspections are a crucial step in confirming that onlot systems meet local and state requirements, protect public health, and maintain environmental standards. We will cover the inspection process from start to finish, including pre-installation planning, documentation requirements, and key inspection points during construction. Topics will include how to prepare for regulatory inspections, common compliance issues, and the inspector's role in verifying installation quality. Designed for professionals and regulators alike, this session will enhance understanding of regulatory standards, streamline the inspection process, and promote best practices for high-quality installations. Attendees will leave equipped with strategies to improve compliance outcomes, foster professional relationships with regulators, and ensure septic systems are installed to the highest standard.

#### Effluent Pump Power & Electrical Wiring

Presenters: Jacob Epperson & Jeff Weingartner, Crane Pumps **Description:** This presentation will delve into the essentials of powering and wiring effluent pumps within onsite wastewater treatment systems, a critical component for maintaining system efficiency and reliability. Effluent pumps are vital for transporting treated wastewater to drain fields, and their safe, proper wiring is essential to both system performance and user safety. Topics will include determining available power and understanding the basics of electrical wiring. We will review wiring best practices, including selecting the correct wire gauge, grounding procedures, and implementing circuit protection to prevent electrical issues and ensure pump longevity. Troubleshooting techniques for common pump power and wiring issues will also be discussed. This presentation is designed for professionals involved in the installation and inspection of septic systems. Participants will gain confidence in identifying safe, compliant wiring practices and ensuring pump systems operate effectively, minimizing risks of electrical failure and supporting the overall reliability of wastewater systems.

#### Harnessing GIS & GPS in Onsite Wastewater Treatment Systems

**Presenters:** Travis Haber & Moises Carreras, All County and Associates **Description:** This presentation will explore the powerful applications of Geographic Information Systems (GIS) and Global Positioning Systems (GPS) in the design, installation, and management of onsite wastewater treatment systems. These technologies provide septic system professionals with tools for precision site analysis, streamlined recordkeeping, and enhanced project planning, supporting both compliance and efficiency. Attendees will learn how to integrate GIS and GPS in various stages of septic system work, including site evaluation, soil and topography mapping, and system layout. We'll discuss how GIS data layers can help assess environmental factors such as watershed proximity, soil conditions, and slope, leading to more informed design choices. Participants will also gain insights on using GPS for accurate system component placement and creating digital records to facilitate ongoing monitoring and maintenance. Ideal for both professionals and regulators, this session provides actionable knowledge on how GIS and GPS can enhance accuracy, support compliance, and promote sustainable system management.

#### Tuesday, February 4, 2025

#### Employment Discrimination & Workplace Harassment: Legal Responsibilities and Best Practices for a Safe, Inclusive Workplace (half day)

Presenter: Drew Adair, Deasey, Mahoney & Valentini, Ltd. **Description:** This half day workshop will provide a comprehensive overview of employment discrimination and workplace harassment laws, equipping small businesses and municipal staff with the knowledge needed to foster a respectful and legally compliant work environment. Employment discrimination and harassment can have significant legal and financial implications, as well as lasting impacts on workplace morale and employee well-being. We'll cover key aspects of federal and state anti-discrimination laws, including protections against discrimination based on race, gender, age, disability, and other protected characteristics. Topics will also include defining and identifying workplace harassment, reporting obligations, and best practices for developing policies that align with Equal Employment Opportunity (EEO) standards. Additionally, we'll discuss the roles of managers and supervisors in preventing and addressing discrimination and harassment, as well as strategies for conducting thorough, unbiased investigations. This session is designed to empower workplace managers with practical knowledge on upholding legal standards and promoting a safe, inclusive workplace. Attendees will leave with a clearer understanding of their legal responsibilities, actionable steps for compliance, and tools to create a positive, equitable environment for all employees.

#### Proper Stream Testing & Effluent Sampling Techniques Presenter: Mark Dierolf, Dierolf Water Solutions

**Description:** This presentation will focus on the critical practices of stream testing and effluent sampling within the context of onsite wastewater treatment, emphasizing the importance of accurate testing to protect water quality. Proper sampling and testing procedures help professionals assess the impact of effluent on nearby water bodies and verify that treatment systems are functioning as intended. Topics covered will include best practices for collecting representative effluent samples, stream testing protocols, and the proper use of equipment to ensure consistent, reliable data. We will discuss the interpretation of test results, including key indicators such as nitrogen, phosphorus, BOD (biochemical oxygen demand), and pathogen levels. Additionally, we'll explore how to document and report findings in compliance with environmental standards. This presentation is ideal for professionals and regulators seeking to enhance their understanding of water quality monitoring in relation to onsite systems. Attendees will leave with practical knowledge on conducting effective testing, interpreting results, and ensuring their projects meet environmental protection goals and regulatory compliance.

#### Field Indicators of Hydric Soils: Identifying Site Suitability for Onsite Wastewater Systems Presenter: Mike Callahan, SoilHub

**Description:** This presentation will provide an in-depth guide to identifying field indicators of hydric soils, a critical skill for assessing site suitability in onsite wastewater treatment system design. Hydric soils are characterized by specific physical and chemical properties that develop under saturated conditions, impacting the ability of soil to effectively treat wastewater. Recognizing these indicators helps professionals avoid unsuitable locations and prevent system failure. We'll cover the key features of hydric soils, including soil color patterns, mottling, organic content, and texture, and discuss how each relates to water retention and drainage capacity. Additionally, participants will learn how to use field tools such as Munsell soil color charts and soil probes to accurately identify hydric conditions. This session will equip attendees with the skills to recognize hydric soil indicators in the field, make informed site

assessments, and improve system design accuracy. Participants will leave with practical techniques to enhance their site analysis process and ensure wastewater systems are located in soil types that support effective, sustainable treatment.

#### The Internal Biology of a Septic System: Understanding Microbial Processes for Optimal Treatment Presenter: Joe Valentine, VW Consultants

**Description:** This presentation will explore the critical biological processes occurring within septic systems that enable the effective treatment of wastewater. Understanding the internal microbiology of a septic system is key to designing, maintaining, and troubleshooting systems that reliably protect public health and the environment. We will discuss the roles of various microbial communities involved in breaking down organic matter, reducing pathogens, and treating nutrients within the septic tank and soil absorption field. Topics will include the anaerobic and aerobic stages of treatment, factors that support or hinder microbial activity, and the impact of household chemicals, temperature, and oxygen levels on system health. Additionally, we will examine how to monitor and maintain the biological balance in septic systems to maximize efficiency and prevent issues like clogs, odors, and system failure. This presentation is ideal for onsite wastewater treatment professionals and regulators looking to deepen their understanding of septic system biology. Attendees will leave with practical knowledge on optimizing system function through biological management, ensuring long-term system performance, and implementing solutions rooted in a fundamental understanding of septic system microbiology.

#### **Inspecting Cesspools**

**Presenter:** Rachel Wick Evangelista, Greenwick Septic Systems **Description:** This presentation will provide the history of cesspools & guidance on the proper inspection of cesspools. Inspecting cesspools presents unique challenges due to their structure, age, and environmental risks. This session will cover the key steps and considerations for conducting thorough, safe, and PSMA-compliant cesspool inspections. Topics will include identifying structural integrity issues, evaluating cesspool function, recognizing signs of failure, and assessing risks to groundwater quality and public health. Designed for PSMA Inspectors, this session will equip attendees with the knowledge and skills to perform reliable cesspool inspections, ensure environmental safety, and support informed decision-making about cesspool maintenance or replacement. Participants will leave with practical strategies to address the unique challenges of cesspool inspections and enhance the safety and sustainability of wastewater management practices.

#### Preliminary Hydrogeological Studies

Presenter: Michael Lane, CPSS & Paul White, P.G., ARM Group **Description:** This presentation will provide a Pennsylvania-specific overview of preliminary hydrogeological studies, emphasizing how state regulations impact onsite wastewater system design and placement. In Pennsylvania, adherence to specific hydrogeological criteria is required to protect water quality and public health for large-volume onlot systems, high-density development, and in areas with known groundwater impacts from nitrate-nitrogen or karst geology. Topics will include the basic requirements for preliminary hydrogeological studies in Pennsylvania, including ways to determine background water quality, rainfall recharge, and estimating the long-term groundwater impacts from new wastewater systems. We'll explore how these studies influence site suitability, system selection, and design modifications that align with Pennsylvania's regulatory framework. This session is ideal for onsite system professionals and regulators working within Pennsylvania, providing the tools needed to navigate hydrogeological study requirements and ensure regulatory compliance.

#### Premier Tech in Pennsylvania

Presenter: Oran Biehl & Barry Helverson, Premier Tech

**Description:** In this break-out session, you will learn about the different products, technologies, and services that are supplied and supported by Premier Tech for both the residential and commercial markets, ranging from compact biofilters, UV disinfection, and distribution boxes to cluster systems, MBBRs, and more. We will cover design, application, and

installation guidelines, discuss service and warranty programs, review PSMA inspection considerations, and highlight what to look for as an SEO when reviewing, permitting, and inspecting these technologies.

#### Wastewater Chemical Engineering & Nitrogen Reduction

**Presenter:** Gary-Lee Espinosa & Sarah Lotfi, PhD, Orenco Systems **Description:** This presentation will delve into the chemical engineering principles behind nitrogen reduction in onsite wastewater treatment systems, a critical factor in minimizing environmental impact and protecting groundwater quality. Excess nitrogen from wastewater can lead to serious ecological issues, including groundwater contamination and eutrophication of nearby water bodies, making nitrogen reduction a priority in system design and maintenance. Attendees will gain an understanding of the biological and chemical processes involved in nitrogen transformation and removal, including nitrification and denitrification. We will explore advanced treatment technologies and engineered solutions that enhance nitrogen reduction, from media filters and biofilters to aerated treatment units. Additionally, we'll examine the impact of operational factors such as temperature, pH, and retention time on nitrogen removal efficiency, with a focus on strategies tailored to Pennsylvania's regulatory requirements. This session is designed for onsite wastewater professionals and regulators looking to deepen their expertise in wastewater chemical engineering and optimize nitrogen management in their systems. Participants will leave with actionable knowledge on nitrogen reduction technologies, regulatory compliance considerations, and best practices to enhance the environmental sustainability of onsite wastewater treatment systems.

### Intro to PSMA's Real Estate Transfer Inspections for SEOs Presenter: Ray Erb, Thomas H. Erb & Sons, Inc.

**Description:** This presentation provides an essential introduction to Pennsylvania Septage Management Association (PSMA) standards for real estate transfer inspections, tailored specifically for Sewage Enforcement Officers (SEOs). Real estate transfers are a critical moment to assess the functionality and compliance of onsite septic systems, ensuring that properties meet established industry standards and do not pose risks to future homeowners or the environment. Attendees will learn about the PSMA inspection protocols, including the comprehensive checklist for evaluating system components, identifying signs of failure, and documenting findings. We'll cover inspection procedures for tanks, absorption areas, and distribution methods. Additionally, the presentation will address reporting requirements, regulatory considerations, and tips for communicating results effectively to buyers, sellers, and real estate agents. This session is ideal for SEOs and other professionals involved in real estate transfer inspections who want to ensure consistency, compliance, and high standards in their inspection practices. Attendees will leave with a solid understanding of PSMA inspection protocols.

#### **Closing Presentation: Solving Your People Puzzle**

**Presenter:** Mark Dierolf, Phenomenal Business Coaching/Dierolf Water Solutions

#### Closing Session: PA DEP Question & Answer Panel

**Presenter:** Janice Vollero, PA DEP & other panelists **Description**: Learn the latest news affecting the onsite wastewater program in Pennsylvania directly from Pennsylvania's Department of Environmental Protection. Have representatives from Pennsylvania's Department's Central Office offices answer your questions in a moderated roundtable format.

\*\*\* ALL TRAINING COURSES & BREAKOUT SESSIONS ARE SUBJECTTO CHANGE. \*\*\*

#### EARLY BIRD DISCOUNT: JAN 18, 2025 REGISTRATION CLOSES JAN 30, 2025

### 2025 Onsite Wastewater SUPER Conference of Pennsylvania CONFERENCE REGISTRATION FORM

Please note: Registrations must be received by **January 30, 2025. Early Bird Discount** is offered to registrations received by **January 18, 2025.** Register online at **www.PASuperConference.org** (pay by credit card or check). Please complete one registration per attendee. If you would like to attend an Add-On training course, you must also be registering for the conference.

#### ATTENDEE INFO:

Attendee Name	:				_SEO #	
Company/Jurisdi	ication:					
Street Address:						
City: State: Zip C	Code:					
Phone:						
	Be sure to indicate your desire			SEOs should use the side of this for	. ,	CWA account.
	e the association with whi	-		ted (check ONL	Y ONE box):	
Members of PSM	A, PASEO, PAPSS, and POWRA a	re eligilbe for the member PSMA	rates.		SS/POWRA	□ Not Listed
REGISTRAT	ION FEES:					
Annual Confe (Mon, Feb 3rd &	<b>rence:</b> (Early Bird thru Jan 18) Tue, Feb 4th)	□ \$350 Member Early □ \$400 Member Stan		□ \$475 Non-Me □ \$525 Non-Me	,	\$
	Onsite Systems Course Tue. Feb 4th - registration for the			□ \$525 Non-Me Conference)	ember	\$
<b>Optional Add-</b> Sunday	On Training Courses: (Must	be registering for Annual	Conference	e or Installation Cou	urse to attend thes	e.)
(Feb 2nd: 9am)	Troubleshooting Onlot S	<b>Systems</b> (full day - lunch	n not inc.)	□ \$120 Member	- □ \$150 Non-Mł	br \$
(Feb 2nd: 9am)	Confined Space Entry (fu	, , ,			□ \$115 Non-Mt	
(Feb 2nd: 9am)	O&M Series (full day - lund	,			<sup>-</sup> □ \$150 Non-Mt	
(Feb 2nd: 9am)	Sewage Facilities Plannin		<b>A</b> \		□ \$75 Non-Mb	
(Feb 2nd: 1pm) (Feb 2nd: 3pm) Monday—	Effluent Pump Sizing & S NORWEWCO (2 hours -		1)		□ \$75 Non-Mb □ \$50 Non-Mb	
•	n) Nat'l Vacuum Truck Tecl ***Space is limited in all traini			□ \$90 Member	□ \$110 Non-M	br\$
(Includes Mon/T	<b>1eal Ticket for Your Guests</b> ue breakfasts, Mon/Tue lunche	s, and Sun/Mon receptio	,	@\$19	95 per ticket	\$
Guest Name(s).			_		TOTAL DUE	\$
METHOD OF	PAYMENT:					
	Check Enclosed (make cl		PO Box	44, Bethlehem, PA	18016)	
Credit Card:	□ Visa □ Master	rCard Dise	cover			
Credit Card Nu	mber:			Exp. Date:	Security Co	ode:
Name on Card:		Sig	gnature:			

Please submit completed registration, along with full payment to: PSMA, P.O. Box 144, Bethlehem, PA 18016 or **REGISTER ONLINE** at www.PASuperConference.org

SUNDAY		DAY - Feb 2nd - OPTIONAL ADD-ON COURSES (extra fees apply	apply)			
9:00am		<ul> <li>□ Confined Space Entry: Safety Protocols and Best Practices - Training Course</li> </ul>	<ul> <li>Sewage Facilities Planning</li> <li>Training Course</li> <li>DEP Course ID#1008TECH- 0087CLRM</li> <li>3 SEO CEUs</li> <li>9:00am-12:30pm</li> <li>+\$60 mbr/\$75 non-mbr</li> </ul>	<ul> <li>☐ Operation &amp; Maintenance Series- Training Course</li> </ul>	Please indicate which educational sessions/courryou plan to attend by checking the box next to desired title in each time slot. You <u>must</u> be preregistered to attend a training course - we cann accommodate training course walk-ins.	Please indicate which educational sessions/courses you plan to attend by checking the box next to the desired title in each time slot. You <u>must</u> be pre- registered to attend a training course - we cannot accommodate training course walk-ins.
1:00pm	6 SEO CEUs 9:00am-4:30pm (lunch on your own) +\$120 mbr/\$150 non-mbr	(2 SEO credits, aplied) 9:00am-4:30pm (lunch on your own) +\$95 mbr/\$115 non-mbr	<ul> <li>Effluent Pump Sizing &amp; Selection – Training Course</li> <li>DEP Course ID#1007HYDR- 0087CLRM</li> <li>3 SEO CEUs</li> <li>1:00pm-4:30pm</li> <li>+\$60 mbr/\$75 non-mbr</li> </ul>	DEP Course ID# (multiple) 6 SEO CEUs 9:00am-4:30pm +\$120 mbr/\$150 non-bmr	NORWECO - Training Course DEP Course ID#1013TECH -013CLRM 2 SEO CEUs 3:00pm-5:00pm +\$40 mbr/\$50 non-mbr	
6:00pm	D Yes, I	plan to attend the welcome r	□ Yes, I plan to attend the welcome reception 5pm-8pm on Sunday evening; □ No, I won't be attending.	rening; □ No, I won't be atte	ending.	
<b>ACINO</b> A	MONDAY - Feh 3rd					
9:00am		Opening Welcome Comments & Keynote	synote Address - Environmental Pro	Address - Environmental Protection in Pennsylvania (unconfirmed)	onfirmed)	
10:45am	<ul> <li>Using Controlled Fill with Septic Systems</li> </ul>	Reviewing PercRite Drip Dispersal System Designs	<ul> <li>Commercial Systems: Inspectors Roundtable</li> </ul>	<ul> <li>Control Panels: Advances in Design &amp; Troubleshooting</li> </ul>	National Vacuum	<ul> <li>Installation of Onsite</li> <li>Wastewater Treatement</li> <li>Systems Training Course</li> </ul>
1:30pm	<ul> <li>Beyond Planning Modules: Properly Completing Other Necessary Forms</li> </ul>	<ul> <li>Performing Perc Tests: Techniques, Accuracy, and Best Practices</li> </ul>	<ul> <li>Fundamentals of System</li> <li>Design: Key Principles,</li> <li>Standards, and Best Practices</li> </ul>	<ul> <li>Cost Analysis &amp; Pricing Strategies for Your Business: Maximizing Profitability &amp; Sustainability</li> </ul>	Truck Technician Training & Certification Training Course 2 SEO CEUs +\$90 mbr/\$115 non-mbr	DAY 1 of 2 DEP Course ID#1001INST- 0001 CLRM) 12 SEO CEUs 9:00cm-5:00cm
3:15pm	<ul> <li>Best Practices for Locating Soil Testing Sites</li> </ul>	Regulatory Inspections     & Septic System     Installations	<ul> <li>Effluent Pump Power &amp; Electrical Wiring</li> </ul>	Harnessing GIS & GPS in Onsite Wastewater Treatment Systems	10:30am-5:00pm	(no extra charge)
5:00pm		Yes, I plan to stay for the hap	□ Yes, I plan to stay for the happy hour & buffet dinner reception 5pm-8pm on Monday evening;	5pm-8pm on Monday eveni	ng; 🗖 No, I won't be staying	. D
UESDAY	TUESDAY- Feb 4th					
8:00am	<ul> <li>Proper Stream Testing &amp; Effluent Sampling Techniques</li> </ul>	<ul> <li>Field Indicators of Hydric Soils: Identifying Site Suitability for Onsite Wastewater Systems</li> </ul>	<ul> <li>The Internal Biology of a Septic System: Understanding Microbial Processes for Optimal Treatment</li> </ul>	<ul> <li>Inspecting Cesspools</li> </ul>	Employment     Discrimination &     Workplace Harassment:     Local Bosconsitiation and	<ul> <li>Installation of Onsite Wastewater Treatement Svetems Training Course</li> </ul>
9:45am	Preliminary Hydrogeological Studies	<ul> <li>Premier Tech in Pennsylvania</li> </ul>	<ul> <li>Wastewater Chemical Engineering &amp; Nitrogen Reduction</li> </ul>	□ Intro to PSMA''s Real Estate Transfer Inspections for SEOs	Best Practices for a Safe, Inclusive Workplace	DEP Course ID#1001INST- 0001 CLRM 12 SEO CEUS
1:00pm			Closing Plenary Session: Solving Your People Puzzle	ple Puzzle		8:00am-4:00pm
2:00pm		Plenary Session: PA DEP	Plenary Session: PA DEP Program Updatrs and Question & Answer Panel Discussion	& Answer Panel Discussion		
4:00pm			Conference Close			

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2025 Onsite Wastewater SUPER Conference of Pennsylvania

## **MESSAGES FROM SPONSORING ASSOCIATIONS**



#### WESTERN CONFERENCE & TRADE SHOW

March 10-11, 2025 Monroeville Convention Center 209 Mall Blvd, Monroeville PA 15146

Exhibitor & Attendee registration information for PASEO's Western Conference will be distributed separately in the New Year. PASEO is planning two days of two tracks of training courses for SEOs in western Pennsylvania. Keep an eye out for more info or visit www.PA-SEO.org.

#### PASEO SEO PRE-CERTIFICATION ACADEMY Four dates/locations planned for 2025:

April 21-25, 2025 (BERKS COUNTY) Boyertown Community Ambulance Service 2 East Second Street, Boyertown, PA 19512

June 9-13, 2025 (CENTRE COUNTY) College Township Municipal Building 1481 E College Avenue, State College, PA 16801

August 25-29, 2025 (BEAVER COUNTY) Beaver County Conservation District 156 Cowpath Rd, Aliquippa, PA 15001

October 20-24, 2025 (YORK COUNTY) York County 4-H Center 771 Stoverstown Road, York, PA 17408

More info on the SEO Pre-Certificatoin Academy can be found at: www.PASEOAcademy.org



#### **PSMA SPRING TRAINING**

March 25-26, 2025 Holiday Inn Grantville 604 Station Rd, Grantville, PA 17028

Obtain or maintain your professional designation as a certified PSMA inspector of onsite wastewater treatement systems.

PSMA Spring Training will include four certification course options for inspectors:

#### 101 BASIC INSPECTOR CERTIFICATION 102 ADVANCED INSPECTOR CERTIFICATION 103 EXPERIENCED INSPECTOR CERTIFICATION SRI STANDARDS REFRESHER CERTIFICATION

Info will be available for PSMA members shortly. Visit www.PSMA.net for more information about PSMA inspector certification courses.

Other opportunites to obtain or maintain your certification in 2025 tentatively include:

July 2025 - 101 Basic Easton, PA area

September 2025 - 101 Basic & 102 Advanced Williamsport, PA

> December 2025 - 101 Basic Lansdale, PA

More info at www.PSMA.net



Register online at www.PASuperConference.org

### 2025 ONSITE WASTEWATER SUPER CONFERENCE OF PENNSYLVANIA

# **REGISTER ONLINE TODAY** Six tracks of onsite wastewater education!

**PASEO** Feb 2-4, 2025 at the Penn Harris Hotel, Camp Hill



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