

## TENTATIVE PROGRAM

# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH



- DESIGNERS
- PUMPERS
- INSTALLERS
- EVALUATORS

Seating is limited, so don't miss out on this one-stop continuing education opportunity.

## REGISTER TODAY!

Our two-day conference is **THE** industry event of the year where you can earn all six of your continuing education contact hours good for the renewal of your NH septic designers and/or installers permit.

Get a jump on your continuing education requirements for the 2017 - 2018 renewal period by registering for both days!

Register in advance before March 8, 2017 and avoid a \$40 late registration fee!

Click [here](#) to register online or follow the link provided on the home page of **gsdia.org**.

---

### HAVE QUESTIONS?

Call us at (603) 228-1231 or email us at [info@gsdia.org](mailto:info@gsdia.org).



# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

GSDIA.ORG

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH

## CONTINUING EDUCATION APPROVALS

Continuing education approval is pending for the following professionals:

### **N.H. State Permitted Designers and Installers:**

3 continuing education contact hours per day by the NHDES Subsurface Systems Bureau

### **Maine Evaluators, Certified Installers, and Certified Inspectors:**

4.5 professional development hours per day

### **Vermont Class A and Class B Licensed Designers:**

3 non-soil continuing education credits per day

### **Massachusetts (NEIWPEC) Soil Evaluators and System Inspectors:**

3 training credit hours (TCHs) per day plus 1 TCH for visiting the exhibit hall

### **NH Certified Wetland/Soil Scientists:**

Per March 2011 changes to the administrative rules of the NH Joint Board, the board does not pre-approve programs. As a CWS/CSS, you are to determine the applicability of a particular hour(s) of session time to the practice of wetland or soil science. Please note that the Ethics Program will offer two hours of credit good toward your renewal. Participation requires that you indicate attendance by pre-registering on the registration form.

## PARKING AT THE RADISSON HOTEL



**GSDI will no longer cover the cost of event parking. A lower "event" rate of \$6 (for up to 8 hours) will be extended to all who use the Granite Street garage connected to the hotel. A map of other parking options will be posted on our website before the conference and a link to the map will be emailed to all participants with email.**

*Why not consider carpooling?*

## CERTIFICATES

Certificates for those who attend will be distributed at the end of the entire program each day. Only those individuals who "sign in" at registration in the morning will receive a certificate. We will not make any different accommodations for individuals to receive their certification, so plan your travel schedule accordingly. If an individual misplaces his or her certificate after the event and requests a duplicate be sent or emailed, the charge will be \$20.00





# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

**GSDIA.ORG**

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH

## MONDAY, MARCH 13, 2017

**8:00 AM** - Check-in and Exhibit Hall Opens with Continental Breakfast

**8:45-9:00 AM** - GSDI Annual Meeting & Election of Officers and Directors

Conference Welcome, Introductions, and Announcements Carl Hagstrom, Conference Committee Chairman, Monadnock Septic Design, LLC, Fitzwilliam, NH

**9:00-10:00 AM** - Opening General Session: Wastewater 101

*Sara Heger, Research Engineer and Instructor, Onsite Sewage Treatment Program, University of Minnesota, St. Paul, MN*

Wastewater 101 – What is it and how do we treat it? Not all wastewater is created equal. This presentation will describe the varying contaminants present in wastewater, the negative affect they have when not properly treated and the laboratory measure used to quantify them. It will also discuss how household and commercial practices affect the characteristics.

**10:00-10:45 AM** - Break with Exhibitors

### BREAKOUT SESSION 1

**10:45 - 11:45 AM**

**Session A** - CDL Licensing Update, Proper Heavy Equipment Securement and Questions & Answers with the N.H. State Police

*Trooper Scott Atherton, Troop G, NH State Police, Concord, NH*

Though he often suggests that he does not have all that much to offer, each year officers from the NH State Police CDL unit never leave without long line of our attendees looking to get their questions and concerns about licensing and vehicle inspections answered.

Trooper Atherton will offer an update on changes to both state and federal regulations and then open the floor to your questions.

**-OR-**

**Session B** - Inspection and Troubleshooting of Septic Systems

*Sara Heger, Research Engineer and Instructor, Onsite Sewage Treatment Program, University of Minnesota, St. Paul, MN*

The presentation will discuss methods and challenges inspecting septic and pump tanks. It will cover common problems an inspector may need to identify and troubleshoot including locating tanks, roots, leakage, and corrosion. It will also discuss how septic systems of the 21st century often see additions of many types of wastewater that did not exist 20 or 30 years ago such as antibacterial soaps, pharmaceuticals and water treatment devices.

**-OR-**

**Session C** - To Tell You the Truth: Everyday Ethics for Everyday People

A two-hour program with a break for lunch.

*Richard P. McCaffrey, Esq., Compliance and Enforcement Counsel, NH Insurance Department, Concord, NH*

Professional engineer and university professor Alfred A. Scalza defines professional ethics as "a set of principles, ideas and attitudes on 'what is right or wrong' that we use to control the way a profession is practiced." This seminar considers ethics in the context of those working with on-site subsurface wastewater disposal systems and will review the special considerations involved when interfacing with governmental agencies.

This program will provide 2.0 hours of continuing education on the topic of ethics and professional practice as required by the administrative rules of the NH Joint Board for both CWS and CSS renewals. Sign-in and sign-out is required to receive a certificate of attendance.





# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

GSDIA.ORG

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH

## MONDAY, MARCH 13, 2017 continued

-OR-

### EXHIBITOR THEATER

**Presenting Company:** Advanced Onsite Solutions

**Topic:** When Water Meter Readings Fail Us and High Strength Wastewater Impact Performance

11:45 AM - 1:00 PM - Buffet Lunch with Exhibitors

Enjoy a great hot lunch, visit with exhibitors, and participate in vendor prize drawings.

### BREAKOUT SESSION 2

1:00 - 2:00 PM

#### Session A - System Sustainability: The Use of Technologies Such as Soil Air

*Gary Spaulding, Advanced Onsite Solutions, Concord, NH*

Learn how one designer successfully uses mechanical technology (SoilAir systems) to introduce oxygen into the leach field environment to rejuvenate stressed leach fields. He will also discuss the use of SoilAir systems in new designs to increase to improve system performance and increase the life of a subsurface disposal system. This program will discuss the design and installation components of the SoilAir system.

-OR-

#### Session B - Erosion Control Techniques and Installation

*Peter Hanrahan, CPESC Erosion Control & Geoprodukt Manager, Everett J. Prescott, Inc., Gardiner, ME*

-OR-

#### Session C - Part II - To Tell You the Truth: Everyday Ethics for Everyday People

Second part of a two-hour program. Attendance at Part I is required to receive a CSW/CSS attendance certificate.

-OR-

### EXHIBITOR THEATER

**Presenting Company:** Cadnet Services, LLP

**Topic:** CAD and Other Computer Software and Tools You Can Use

### BREAKOUT SESSION 3

2:00 - 3:00 PM

#### Session A - Installation Keys for Long Term System Performance – Cold Weather Focus

*Sara Heger, Research Engineer and Instructor, Onsite Sewage Treatment Program, University of Minnesota, St. Paul, MN*

Proper installation techniques, materials, and equipment must be used during construction of onsite wastewater treatment systems to help ensure adequate treatment and acceptance of the wastewater. Installation techniques and selection of equipment are based on maintaining the natural soil conditions of the site while installing a system at the proper depth and elevations. Proper material selection ensures that the installed materials will function as intended by properly distributing, treating, and accepting effluent. Keys during installation that protect the systems in cold climates will be highlighted.

-OR-

#### Session B - "Grease Interceptors!!!! - What Happened to the Grease Trap?"

*Ray Gordon, Environmental IV, Residuals Management Section, NHDES, Concord, NH*

With the adoption of new Subsurface Rules, some may have noticed that grease traps are no more. Ray will address this change and others during his always informative and entertaining presentation.

-OR-



# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

**GSDIA.ORG**

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH

## MONDAY, MARCH 13, 2017 continued

### EXHIBITOR THEATER

**Presenting Company:** Presby Environmental

**Topic:** Presby Environmental's EnviroFin® Onsite Wastewater Treatment System

Information on the EnviroFin® passive treatment system, design examples and installation techniques.

### 3:00 - 3:30 PM - Break with Exhibitors

Enjoy a quick break with exhibitors

### 3:30 - 3:50 PM - Government Relations Update

*Paul Morin and Tricia Newhall-Grahame, Abacus, Hopkinton, NH*

### 3:50- 4:30 PM - Subsurface Bureau Update

*Rob Tardif, P.E. Acting Administrator, NHDES Subsurface Systems Bureau, Concord, NH*

### 4:30 PM - Distribution of Certificates of Attendance

### WE THANK OUR SPONSORS!

Monday & Tuesday food & beverages sponsored by  
Advanced Onsite Solutions, LLC



Conference tote bags  
sponsored by Presby  
Environmental

## TUESDAY, MARCH 14, 2017

### 8:00 AM - Check-in and Exhibit Hall Opens with Continental Breakfast

### 8:45-9:00 AM - Welcome and Announcements

*Carl Hagstrom, Conference Committee Chairman, Monadnock Septic Design, LLC, Fitzwilliam, NH*

### 9:00-10:00 AM - Opening General Session: Using Technology to Your Advantage on the Job Site

*Tom Gardocki, "The Dirt Ninja", Interstate Landscape Company, Hooksett, NH*

During this session Tom Gardocki a.k.a. "The Dirt Ninja" will offer a presentation on the use of GPS and other technology on the job site to set reference points and lay out designs from plans onto the ground. This session will likely be great interest to members of the installer community.

### 10:00-10:45 AM - Break with Exhibitors

## BREAKOUT SESSION 1

### 10:45 - 11:45 AM

### Session A - Quantifying Gas Flow Generated by the Differential Venting of Decentralized Systems

*Kevin Sherman, Ph.D., Technical Specialist, Presby Environmental, Inc., Whitefield, NH*

Decentralized wastewater soil absorption systems are found in a vast array of configurations. One version of these systems takes advantage of the air flow passing over the top of the drain waste vent (also called a roof vent) to draw some gas out of the top of the pipe.

Differentially vented soil absorption systems install a second vent at the distal end of the soil absorption system at an elevation at least 10 feet lower than the roof vent. This type of low vent has been specified in Wisconsin mounds for decades, but not to improve air flow in the soil absorption system. They are also required in New Hampshire and Massachusetts under circumstances where air exchange is thought to be less



# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

**GSDIA.ORG**

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH

## TUESDAY, MARCH 14, 2017 continued

than optimal. Despite their frequent and long history of use, there are relatively few scientific studies that quantify the gas flow through decentralized systems. The goal of this presentation will be to further the discussion about the need for additional venting and what the research from out in the field is telling us.

**-OR-**

### **Session B** - Water Movement in Soil and Septic System Design

*Mickey Spokas, MS, PhD, CPSSSc, UMass, Program Coordinator, Off Campus Soil Programs, Amherst, MA*

This talk will cover infiltration, percolation, aqualudes, aquatards and how these should influence septic system designs.

**-OR-**

### **Session C** - Heavy Equipment Service and Maintenance Tips

*Mike Robinson, Milton/CAT, Londonderry, NH*

An annual favorite, Mike and others from Milton-CAT will offer tips and advice on equipment maintenance techniques to help installers get the most out of their earth-moving equipment. This is the perfect session to bring along your toughest questions about equipment performance and challenges you may be facing with your existing equipment.

**-OR-**

## EXHIBITOR THEATER

**Presenting Company:** Orenco Systems, Inc.

### **11:45 AM - 1:00 PM** - Buffet Lunch with Exhibitors

Enjoy a great hot lunch, visit with exhibitors, and participate in vendor prize drawings.

## BREAKOUT SESSION 2

### **1:00 - 2:00 PM**

#### **Session A** - Evaluating the Impacts of Chloride from Water Softening from SSTs on the Environment

*Sara Heger, Research Engineer and Instructor, Onsite Sewage Treatment Program, University of Minnesota, St. Paul, MN*

This presentation will provide an overview of a new research project at the UMN. When water is softened to remove hardness, salt is used to regenerate the softener releasing chloride to septic systems and wastewater treatment plants (WWTPs). Monitoring to date has shown numerous WWTPs with discharge concentrations greater than limits for protecting aquatic life. In rural areas we may have similar problems, given the prevalence of private septic systems near lakes and streams utilizing water softeners. By better understanding softening salt use, we will determine potential methods required to make significant progress in the reduction of this salt use.

**-OR-**

#### **Session B** - Best Practices for Drainfield Design and Installation Below Impervious Surfaces

*Dick Bachelder, Sr. Regulatory Specialist, Infiltrator Water Technologies, Old Saybrook, CT*

**-OR-**

#### **Session C** - The Influence of Soil Physical Properties (Texture and Structure) on Septic System Design

*Mickey Spokas, MS, PhD, CPSSSc, UMass, Program Coordinator, Off Campus Soil Programs, Amherst, MA*

This talk will cover elements of soil texture and structure with emphasis on septic system design; what you should and should not consider.

**-OR-**



# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

**GSDIA.ORG**

Monday, March 13 & Tuesday, March 14, 2017

RADISSON HOTEL, MANCHESTER, NH

## TUESDAY, MARCH 14, 2017 continued

### EXHIBITOR THEATER

**Presenting Company:** Sitech Northeast

**Topic:** Using Machine Automation to Reduce Operating Costs

### BREAKOUT SESSION 3

2:00 - 3:00 PM

#### Session A - Understanding and Working with Shoreland Permits

*Jack Eaton, CPESC, Certified Erosion Control, Goffstown, NH*

**-OR-**

#### Session B - Challenging Waste Streams

*Sara Heger, Research Engineer and Instructor, Onsite Sewage Treatment Program, University of Minnesota, St. Paul, MN*

More septic systems are being negatively impacted by the use and disposal of varying chemicals, cleaners, medicines and anti-bacterial products. This presentation will cover how to identify this problem and troubleshoot the system. In addition, chemicals of emerging concern (CEC) which are showing up in our lakes, rivers and streams, groundwater and even in tap water will be discussed. This is obviously concerning for our health but how do these chemicals impact our wastewater treatment systems? This presentation will discuss what they are, how they can potentially be removed and what we can do as an industry to limit their impact. It will also address the impact of adult foster homes provide assisted-living services—including nursing and 24/7 care—for individuals requiring special medical and behavioral needs. Wastewater from these homes and the corresponding effects on conventional onsite sewage treatment systems, likely differs from average residential sources but is not fully understood. The University of Minnesota Onsite Sewage Treatment Program (OSTP) conducted a short-term study in 2013 of six foster homes and one non-foster system (for comparison). This presentation summarizes the project

findings and recommends septic system management practices that may help prevent future problems.

**-OR-**

#### Session C - Report on Great Bay Pilot Testing on Nitrate Reducing Barriers

*Lenny A. Lord, PhD, CSS, CWS, District Manager and Vicky Stafford, Assistant District Manager, Rockingham County Conservation District, Brentwood, NH*

Learn about the findings of pilot testing of nitrate reducing permeable reactor barriers installed in locations in Brentwood and Durham, NH. The pilot testing program grew out of larger efforts to identify and reduce sources of nitrates making their way into the water of Great Bay. Failing septic systems were among several sources thought to be contributing to the problem.

#### 3:30 PM - Closing General Session: Making the Most of Social Media, YouTube and Other Tools to Market Your Company and Highlight Your Services to a Changing Consumer Marketplace

*Tom Gardocki, "The Dirt Ninja" of Interstate Landscape Company, Hooksett, NH*

We welcome back the "Dirt Ninja" for a lively presentation on how he has met with success through the use of social media, YouTube and other means of customer engagement to market his business. This presentation is similar to what he offered at the 2017 WWETT show in Indianapolis back in February and will feature some of his demonstration videos.

#### 4:30 PM - Distribution of Certificates of Attendance





**Granite State Designers and Installers Association**

**53 Regional Drive, Concord, NH 03301**

RETURN SERVICE REQUESTED

## CONFERENCE EXHIBITORS (As of January 30, 2017)

AAA Pump Service, Inc.	Infiltrator Water Technologies	Polylok, Inc.
Advanced Onsite Solutions, LLC	J & R Sales and Service, Inc.	Presby Environmental, Inc.
Andrew J. Foss Company, Inc.	Maine Technical Source, Inc.	R.E. Prescott Co., Inc.
Blake Equipment Co.	New England Laser & Transit Co.	Septic Preservation Services
CADNET Services, LLP	New England Septic Solutions	SeptiTech
Clear Water Industries	NHDES Residuals Management	Shea Concrete Products, Inc.
Eastpoint Lasers, LLC	NHDES Subsurface Systems Bureau	SITECH Northeast
E.J. Prescott, Inc.	Oakson, Inc.	Water Industries, Inc.
F.R. Mahoney & Associates, Inc.	Orenco Systems, Inc.	William N. Lamarre Concrete
HD Supply Waterworks	Pepin Precast	Products, Inc.

**OVERNIGHT ACCOMMODATIONS:** Need a hotel guestroom? A limited block of rooms are available at the Radisson Manchester at the GSDI rate of \$134 plus tax per night. Call 1-800-333-3333 and ask for the GSDI rate or go online at [radisson.com/manchesternh](http://radisson.com/manchesternh) and use promo code GSDI17. The room reservation cut-off date is Sunday, February 19, 2017.



## 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

**GSDIA.ORG**





# 30<sup>TH</sup> ANNUAL GSDI SPRING SEPTIC SYSTEM CONFERENCE & EXPO

**Online registration is available AND  
you can use a major credit card too!**

Visit [GSDIA.org](http://GSDIA.org) and click on the registration  
link on our home page.

**Monday, March 13 & Tuesday, March 14, 2017**

**RADISSON HOTEL, MANCHESTER, NH**

Company/Town/Agency Affiliation: \_\_\_\_\_

Business Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

GSDI Member? (yes/no) \_\_\_\_\_ Employees and spouses of members can register at the member rate if the member registers at the same time.

**To register online (via credit card or check), click [here](#). Please alert us to any dietary restrictions or ADA requirements.**

Attendee Name: \_\_\_\_\_

☐ Monday & Tuesday Program ☐ Monday Program ONLY ☐ Tuesday Program ONLY  
☐ Monday Ethics Program ☐ Designer # \_\_\_\_\_ ☐ Installer# \_\_\_\_\_ ☐ Pumper ☐ Evaluator

Attendee Name: \_\_\_\_\_

☐ Monday & Tuesday Program ☐ Monday Program ONLY ☐ Tuesday Program ONLY  
☐ Monday Ethics Program ☐ Designer # \_\_\_\_\_ ☐ Installer# \_\_\_\_\_ ☐ Pumper ☐ Evaluator

Attendee Name: \_\_\_\_\_

☐ Monday & Tuesday Program ☐ Monday Program ONLY ☐ Tuesday Program ONLY  
☐ Monday Ethics Program ☐ Designer # \_\_\_\_\_ ☐ Installer# \_\_\_\_\_ ☐ Pumper ☐ Evaluator

## Registration Fees (per person)

Two-Day Program:	\$130 Member rate	\$155 Non-Member Rate
Monday ONLY:	\$90 Member rate	\$115 Non-Member Rate
Tuesday ONLY:	\$90 Member rate	\$115 Non-Member Rate

**Register in Advance by March 8 to Avoid  
Higher On-Site Rates!**

Walk-in registrations will incur an additional  
on-site processing fee of \$40 per person.

Town/Municipal Officials not holding a designer's or installers license: \$45 (per day)

**Total Amount: \$** \_\_\_\_\_

Please make checks payable to: GSDI or charge my VISA / Mastercard / American Express

Card Number: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Name on Card: \_\_\_\_\_ Security Code: \_\_\_\_\_

Mailing Address if different than above: \_\_\_\_\_

Cancellation Policy: Advance registrations are important to ensure adequate accommodations.

Cancellations made on or before March 3, 2017 will qualify for a full refund. No refunds will be offered after that date as commitments have been made to the hotel.

**Return by mail to:** GSDI, 53 Regional Drive, Suite 1, Concord, NH 03301 or return by fax to: (603) 228-2118