

Summer Issue 2020

SepticSmart Week 2020

Save the Date!
September 14-18, 2020

Plan ahead for SepticSmart Week!
EPA's annual event focused
on how to care for and
maintain your septic system.

For more information, visit
www.epa.gov/septic.

septicSMART
U.S. Environmental Protection Agency

EPA

70 SW Century Dr.
Suite 100, #353
Bend, Oregon 97702
(541)389-6692
O2WA.org
info@O2WA.org

INSIDE THIS ISSUE

Statements and opinions expressed in these articles are solely those of the author or authors and may or may not be shared by O2WA.

Presidents Message
Buyers Guide
Lobbyist to Support O2WA
New Installers
Welcome Deb Mailander
Q&A
Soils on the Horizon
Craft3 Update
Traffic on Wet Clayey Soil
Leads to Failure
Disinfectant Overkill:
Potential Harm for Septic
Systems
Wastewater and Coronavirus
(COVID-19)
Member Survey
Online Classes & Certification
Roles of Regulators and
Consultants
Hours of Service Drivers Final
Rule
Hydrosplitters—Equal
Distribution on a Slope

O2WA OFFICERS

President
Dennis Boeger, PE
Past President
Larry O'Connor
Vice President
Kimberlee A. Aldrich WWS
Secretary/Treasurer
Scott Davis

BOARD OF DIRECTORS

Septic Tank Pumper
Kevin Riddle
Engineer
Dennis Boeger, P.E.
Manufacturer
Brad Routh
Soil Scientist
Claudia Hill, REHS
Installer
Edward Varga
Sanitarian
Robert F. Sweeney, REHS
Tank Mfg.
Scott Davis
O&M
Lissette Hamer-Richardson
County Regulator
Kimberlee A. Aldrich WWS
Industry at Large
Pat McVay
DEQ Exofficio
Randy Trox, REHS
Executive Director
Belinda Rasmussen, CMM
Lobbyist
Darrell W. Fuller

PRSR STD
US POSTAGE
PAID
BEND OR
PERMIT NO 473



H.D. FOWLER

Company



waterworks



pumps



fabrication



irrigation



service

pumps & irrigation



Let H.D. Fowler take your project
to the next level with the industry's
best products and know-how.

Discover how we can work together
to get it done for your business at
www.hdfowler.com

competitive prices
unmatched value
quality products
added service

Washington | Bellevue 425.746.8400, Bellingham 360.734.8400, Bremerton 360.377.4507, Marysville 360.651.2400, Olympia 360.459.7300, Pacific 253.863.8600, Pasco 509.545.0255, Spokane 509.568.8400, Vancouver 360.574.9377, Wenatchee 509.886.8804, Yakima 509.248.8400
Oregon | Eugene 541.607.0081, Medford 541.770.4432, Redmond 541.923.2090, Wilsonville 503.783.3490 **Idaho** | Boise 208.846.8366, Hayden 208.772.9060, Idaho Falls 208.522.3466, Twin Falls 208.734.8838 **Montana** | Bozeman 406.388.1169 **Utah** | Salt Lake City 801.896.8800

PRESIDENTS MESSAGE by Dennis Boeger, PE, CWRE

In my first message as President of O2WA, I want to thank you for all that you do to protect the environment and the public. I know I just sounded like a regulator, but it's true that what we do is important. I would certainly consider our collective duties as being "essential". I'm also very thankful that my engineering path diverted some 30 years ago from traffic and transportation engineering to onsite.

Our recent annual conference held in Eugene in February seemed well attended and I had the opportunity to meet many of you during that time. I enjoy these conferences as we get a chance to see folks face to face at least once per year. It's crazy to me that we were all huddled together in early February, and a little over 2 months afterwards we're social distancing! I'm sure we're all ready to slowly get back to some kind of normal.

Your O2WA Board is working hard to respond to the current crisis in areas such as fostering online certification courses at Chemeketa, and for ongoing CEU courses. We are also considering options for the upcoming Fall conference, and to enhance scholarships for students, and other membership benefits.

I wish you a healthy and productive Summer.



Dennis J. Boeger, PE, CWRE
President, O2WA
(541) 556-5779

BUYERS GUIDE—THANK YOU TO OUR VENDORS AT THE 2020 CONFERENCE...

Bancorp Insurance	541-536-1726	bancorpinsurance.com
Craft3	888-231-2170	craft3.org
Davis Sales	503-522-8239	ashlandpump.com
Ferguson Waterworks	541-225-2095	ferguson.com
FMI Truck Sales & Service	503-286-2800	fmitrucks.com
GT Gordon & Associates	360-566-1470	gordonandassoc.com
HD Fowler Co	503-969-1635	hdfowler.com
Infiltrator Water Technologies	860-577-7030	infiltratorwater.com
Lowridge Onsite Technologies, LLC	425 750-4922	lowridgetech.com
Matzke Sales, Inc.	253-872-2029	matzkesales.com
Affordable Septic Systems	541-928-5074	affordableseptic.com
Orenco Systems, Inc	541-459-4449	orencosystems.com
Pap'e Machinery	541-463-2900	papemachinery.com
RepCoSalesAgency	503-720-7186	RepCoSalesAgency.com
Roth North America	315-579-3326	RothMultiTank.com
Spartan Tool	800-435-3866	SpartanTool.com
Trade Tool and Supply Corporation	503-221-8665	tradetoolsupply.com
Willamette Graystone	541-727-7666	willamettegraystone.com

For all approved Onsite Wastewater Treatment Products— <https://www.oregon.gov/deq/Residential/Pages/Onsite-Products.aspx>

WELCOME DEB MAILANDER TO THE OREGON DEQ



Onsite program manager Dave Belyea's last day at DEQ was May 29th. Deb Mailander is now the Western Region Onsite and 401 manager. She manages the 'direct service' offices in Coos Bay, Medford and Pendleton as well as onsite program staff in Eugene and Salem. Deb is a collaborative and experienced manager with a solid background in conservation and environmental law. She comes to DEQ from the University of Oregon, where she was the Department Manager for the Labor Education and Research Center. Her prior experience also includes working as an attorney for the Western Environmental Law Center where she helped litigate Clean Water Act and toxics cases. She has Bachelor of Arts degrees in Geography and in Environmental Studies from UC Santa Barbara and a law degree with a certificate in natural resources law from the University of Oregon.

O₂WA ADDS LOBBYIST DARRELL FULLER TO SUPPORT EFFORTS



Darrell Fuller is a native Oregonian hailing from Klamath Falls. He has been involved in Oregon's legislative and political process for more than thirty years. As a lobbyist and association manager, he has represented private sector business associations since 1996. Darrell focuses his lobbying efforts on behalf of locally owned, small and medium sized "main street" businesses, many of which are family-owned. Darrell's clients include auto dealers, auto repair shops, auto appraisers, auto dismantlers, land surveyors, power sports dealers and plumbing-heating-cooling contractors.

Prior to lobbying, Darrell worked at the State Capitol as a committee administrator (Senate Business & Consumer Affairs) and on the personal staff of legislators. He has worked on countless campaigns for federal, state and local candidates and numerous ballot measures. Darrell has a B.A. in Political Science from Willamette University. In addition, he studied at Xiamen University in the Fujian Province of China, and at American University in Washington, D.C. while interning on Capitol Hill for Oregon Congressman Bob Smith.

Darrell is married to his college sweetheart, Kelly, and they have two children: Their son, Daniel, is a first-year graduate student at Point Loma Nazarene University in San Diego, and their daughter, Kassie, is a Junior at the same institution (although she is spending this term studying in the United Arab Emirates).

WELCOME TO THE INDUSTRY... INSTALLER CERTIFICATION RECIPIENTS

Ken Babcock - Babcock Bros Inc
Mark Barkely
Trystan Campbell - Campbell Brothers Construction, Inc
Jared Carey - Lil' Stinky Environmental Service, Inc
Spencer Chamberlain - Pacific Excavation
David Danielson - Danielson Contractors Inc
Bryan Davidson - Anytime Septic Service
Woody Erhart - WEME Construction
Priscilla Esplin - VP Real Estate Investment Services
Tony Feasel - Boylan Construction Inc
Kyle Fendley - Best Septic
Burt Gerber - Oregon Pacific Leasing
Zachary Gogenola - Zachary Gogenola Construction
John Graham - Alpha Environmental
Carlos Guerrero - Alpha Environmental
Juan Hernandez - NW Home Services
Rob Hopson - Hopson Services LLC
Christopher Huson - Huson Excavation and Tree Service
George Kruse - George Randolph Kruse
Darren Lee
Jason Lowery - Boylan Construction Inc
Gerardo Martinez - Today's Innovation Inc
Casey McCormick - Old Town Concrete & Excavation
Joel Morrison - Morrison Built Inc

John Mosier - Buzy Bee Services
Gregory Overton
Daniel Parker - Parker Northwest LLC
Matt Peacock - Above All Sanitation, Inc
Ansley Pennington - Above All Sanitation, Inc
James A Popson Jr - 3 Lakes Construction LLC
David Richardson - Homestead Excavation Inc
Charles Richmond - Richmond Development LLC
Darren Risseuw - Darren Risseuw Trucking LLC
Cody Roth - Stutzman Excavation Inc
Rayne Royer - A-1 Septic & Power Rooter Service, LLC
Andrey Sakaly - Northwest Excavating LLC
Matthew Sellars - Lil' Stinky Environmental Service, Inc
Scott Shale - SJS Excavation LLC
Richard Shaw - A-1 Septic & Power Rooter Service, LLC
Richard Smalley - Roto-Rooter Douglas County
Daniel Stenkamp - Muck Septic Service
Kevin Sweet
Troy Thoreson - Thoreson Excavating LLC
Yuriy Uskov
Zachariah Webster - Brumbaugh Manufactured Homes
Kevin West - Central Oregon Log Home
Jeremiah Wolff - Mr Rooter Plumbing of Salem
Zachary Wooldridge - Earth Management

Q&A by Brian Rabe, CPSS, WWS

Question: I have been retained as the operations and maintenance service provider for a commercial ATT system under a county permit. The design (prepared by a registered professional and approved by the county) lacks several important details, such as which tanks to use, float settings, timer settings, and other details. I contacted the designer and was told to contact the manufacturer of the ATT system for that information.

Answer: The manufacturers provide default settings for most "cookie cutter" configurations, such as the common single-family residential system. However, the DEQ-approved configurations for larger systems (up to 2,500 gallons per day), that can be installed under a county-administered construction-installation permit, require many design elements be determined based on site-specific information. It is the responsibility of the designer to establish the various site-specific details and show them on their plans. This includes mode of operation (time dose, programmed dose, demand dose) at each stage of the process, timer settings, float settings, specific tanks to be used and internal dimension for inlet and outlet fittings, effluent screens, pump vaults, and many other important details. It is the responsibility of the county regulator to confirm that this information is provided by the designer before issuing a permit. Since the plans and permit for this project were readily available on the internet, I was able to review them and they were, in fact, sorely lacking most of these critically important details. Unfortunately, the installer and the service provider are left to chase them down and/or guess. That is a burden that should not be borne by those parties or the owner.

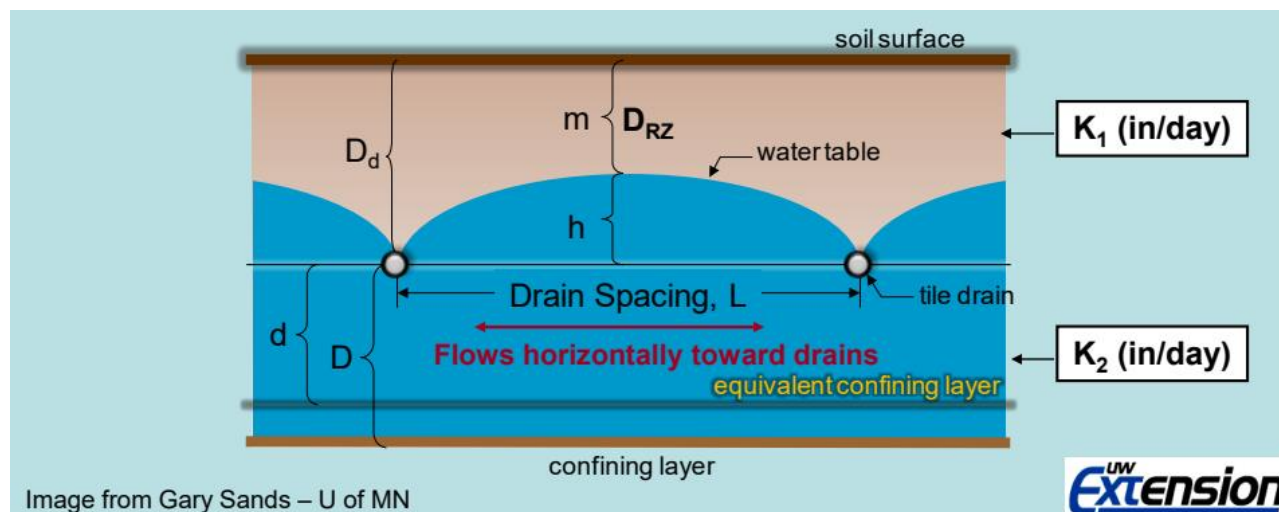
I have discussed water tables on several occasions in this column, including the sometimes-fuzzy distinction between temporary and permanent water tables, predictive features, and direct measurements for determining the height of a water table, etc. Understanding the nature of a water table on a specific site is critically important. Sometimes there is nothing we can do about it. However, sometimes we have the ability (under certain specific circumstances) to reduce the level of a water table and improve the approval conditions on a site.

The most commonly used tool is a groundwater interceptor, often called a “curtain drain” since it acts like a curtain to block the lateral flow of water on slopes greater than 3 percent and divert it around a drainfield. This approach is for temporary water tables with a restrictive layer, such as bedrock or a hardpan, that serves as a floor. The curtain drain consists of a trench excavated deep enough to penetrate the restrictive layer. The interceptor needs to be a minimum of 10 feet upslope from the highest proposed drainfield trench. A perforated pipe is installed in the bottom of the trench and porous media (drain rock or alternative media bundles) are placed to within 12 inches of the surface. The trench is installed on the contour and extends the full length of the drainfield (and at least a few feet beyond). A tightline is installed across the contours to carry the intercepted water to daylight at a point below the drainfield (initial and replacement), preferably to an existing surface water feature such as a roadside ditch. Depending on site-specific conditions, curtain drains can lower the highest point of saturation by at least a couple inches and often by several inches.

Another form of groundwater interceptor is for sites with slopes less than 3 percent. If a curtain drain is used, the setback from the nearest part of the drainfield trench increases to 20 feet. On nearly level sites, a tile dewatering system may be an option to lower temporary or permanent water tables. The soils need to be silty clay loam or coarser and drainable to be eligible. A tile dewatering system is similar to a curtain drain except that the dewatering trench extends all the way around the proposed drainfield. The most common obstacle to using a tile dewatering system is a lack of enough fall to enable drainage by gravity to an outlet. The depth of the dewatering trench is not influenced by a restrictive layer, but is specified based on the type of water table. The maximum spacing between the longer sides of a rectangular tile system is 70 feet, which essentially limits the number of trenches (after accounting for the 20-foot setback on both sides) to 4. The reason for the maximum spacing is due to a standard principal of drainage – the water follows the path of least resistance toward each tile with a resulting “cone of depression” like what develops around a water well when the pump is running. The water level is lowest at the pipe and the slope of the water table toward the pipe is a function of the gradient (height of the water table at the midpoint between the tiles) and effective porosity (resistance to flow based on the sizes, volume, and connectedness of soil pores). Monitoring of the water table at the midpoint between tiles is often required to determine its effectiveness and guide the subsequent approval criteria, especially maximum depth of the soil absorption trench.

Each of these options for lowering the water table at selected sites can make the difference between needing an expensive advance treatment system or a simpler standard-like alternative system. More importantly, each of these options can be used to take a site that has been denied and potentially create a condition that is approvable. If you are the property owner wanting to build your dream home, even an advanced treatment system with a few extra bells and whistles is better than no system at all.

That’s all for now. Remember, Soil Rocks!



CRAFT3 AN UPDATE ON THE CLEAN WATER LOAN IN OREGON

Jena Ross, VP, Clean Water Program Manager

Unfortunately, due to a shortfall in funding, Craft3 has made the difficult decision to suspend offering new Clean Water Loans to Oregon homeowners after June 30, 2020.

Since the start of the Clean Water Loan program in Oregon, we have been clear with our funding partners that we cannot operate this program without periodic infusions of grant capital. But despite bipartisan support in the legislature, no further capital for this program has been made available by the state since 2017. As a result, we have exhausted the capital we have available to lend.

For now, here is what you need to know:

1. Craft3 will accept and process new applications received through the June 30, 2020 cutoff. As of July 1, 2020, we will stop accepting new applications. 2. If an application is approved, loan documents must be signed within 90 days; no extensions will be allowed once the cutoff passes. Approval and signing may occur after June 30, 2020 providing the application was received on or before June 30, 2020.

It has been our great pleasure to serve families throughout Oregon. Our partnership with public health officials, contractors, legislators, and advocates has result-

ed in \$3 million invested to repair or replace septic systems in 27 counties. Those investments have already supported 159 families (26 percent of which were low-income) and treated 208 million gallons of wastewater annually.

Craft3 will continue exploring ways to bring back the Clean Water Loan program in the future. If funding does become available, we will be back in-touch. In the meantime, we encourage interested parties to contact their state legislators to encourage making additional funding available to this program so that lending can resume.

Please contact us if you have any questions or concerns. Thank you for being our partner in improving water quality in Oregon.

Jena Ross, VP, Clean Water Program Manager
42 7th St., Suite 100, Astoria, OR 97103 Telephone: 888-231-2170, Ext. 171 Cell: 541-213-7613 Fax: 360-455-4879
jross@craft3.org NMLS ID# 389873 | Craft3 NMLS# 390159

Craft3 strengthens economic, ecological and family resilience in Pacific Northwest Communities.
www.craft3.org | facebook.com/Craft3org | twitter.com/Craft3org

TRAFFIC ON WET CLAYEY SOIL LEADS TO FAILURE by Claudia Hill, REHS

New installers often ask where to dig test holes, and learning to read the landscape for system location is an important part of our experience tool set. But where depth to saturated soil conditions is an important consideration, learning when to install is a tool just as important.

How the soil above and below the saturation zone is treated can have a big impact on how the system functions. Biological life in the soil, such as roots, microbes, arthropods and others give off secretions that act as glue to hold soil bits together. These globs of soil, called peds, and the spaces between them create soil structure. Structure is influenced by how much sand, silt and clay is in a given soil. For the situation below, it is important to know that clayey soils have a lot of pore space, but for many types of clay the majority of pores are really tiny. When pressure is applied when clay is wet or damp, tiny pores are pressed closed. I thought of those pore arrangements recently at a site in north Marion County.

File records for this particular site, located on a flat terrace above the Willamette River, noted clay and silt. The depth to saturation, indicated by redoximorphic features, was marginal but did pass for an ATT. The installer was experienced, conscientious, and known for high-quality work. But this turned out to be an unforgiving site.

As regulators we seldom see a system after final sign-off, and usually system problems result in a call to the installer, not the inspector. But every once in a while we get to see how things have gone sideways. This site visit was related to a time of sale inspection for a system about ten years old. The inspector noted normal ground saturation for the season, and that there had been no rain for a few days. Although the subject property and surrounding properties did not have standing water, the location of the drainfield was ponded. The distribution boxes were underwater and the system was deemed to be in failure. Contact with the applicant revealed the home was not even occupied.

It is impossible to know for certain all the events that led to this failure, but it appeared the drainfield area was affected during installation since the ponding was just in the drainfield area. What little porosity there was when the site was first evaluated was no longer enough, as it was remaining ponded for days after rain. And once porosity in clay is gone, it is not coming back until those roots, microbes and arthropods do a thorough renovation.

For this site that did not drain and a drainfield that could not function in wet weather, the end result was installation of a replacement drainfield done with extra care.

DISINFECTANT OVERKILL: POTENTIAL HARM FOR SEPTIC SYSTEMS

By Sara Heger, Ph.D. May 18, 2020 Installer Magazine compliments of Cole Publishing

The overuse of antibacterial cleaning products and sanitizers can have a negative impact on your customers' septic systems

Septic systems can handle small amounts of disinfectants, but with the current health concerns related to COVID-19, there are both existing and new products that may be impacting septic systems.

1. Sanitizing wipes – present a clogging and sanitizing issue
2. Laundry sanitizers – both bleach and nonbleach products that claim to kill 99.9% of bacteria
Ammonium quaternary compounds (**quats**) are found in household cleaning products and are registered as pesticides with the Environmental Protection Agency, meaning you will frequently find them listed as active ingredients on the front label of disinfectant products. Quats are disinfectants used alone or added to cleaning products. Manufacturers have added them to dishwashing liquids, hand soaps, window cleaners, all-purpose cleaners, floor products, laundry detergents, baby care products, disinfectant sprays and wipes, air fresheners and other cleaning products that advertise antimicrobial activity.

In most cases, sanitizers are overkill for everyday household cleaning needs and there is no need for quats to sterilize the surfaces in homes. Lab testing shows quats do effectively kill many kinds of harmful microbes, but there are serious potential side effects that comes along with that effectiveness. Though quats kill germs on surfaces and in laundry, studies in households have never been able to show that they are more effective than soap and water. [There has never been a study showing reduced illness at home from using antibacterial cleaners.](#) On the other hand, frequent hand washing with soap and water has proven health benefits.

Quats do kill bacteria and viruses, but some antibacterial products are lung irritants and can contribute to asthma and other breathing problems. For many people, they cause skin irritation and rashes. Most antibacterial wipes carry a recommendation to wash your hands after use, which often defeats the purpose of using them. The widespread use of quats is of concern as they enter our environment. Overuse of antibacterial products is creating superbugs that are resistant both to quats and antibiotics.

In recent years, detection of microbes that are resistant to quats is becoming increasingly more common. In addition, microbes that are resistant to quats have been shown commonly to be resistant to other antibiotics as well, compounding the problem of antimicrobial resistance. Antibiotic resistance happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them. That means the germs are not killed and continue to grow.

Another item to consider is that many antibacterial products will remain on a surface long after use. This means that exposure continues every time you touch that surface. Again there is a reason that disinfectant wipes with quats also recommend against using them on any food-

contact surfaces (like cutting boards, plates or cutlery, highchair trays, etc.) because these potent chemicals can contaminate the food they come into contact with, even well after cleaning is done.

How to avoid hidden sanitizers

Tell customers concerned about the impact of their cleaning products on the septic system to:

1. Look for cleaning products that do not advertise as “antibacterial.”
2. If they need a sanitizer, they should check the front label, which is required to list the active ingredients, and to avoid products which contain the following ingredients, which are forms of quats:

- Alkyl dimethyl benzyl ammonium chlorides (C12-16)
- Alkyl dimethyl benzyl ammonium chloride (C14 60%, C16 30%, C12 5%, C18 5%)
- Alkyl dimethyl ethylbenzyl ammonium chloride (C12-14)
- Alkyl dimethyl ethylbenzyl ammonium chlorides (C12-18)
- Ammonium chloride
- Benzalkonium chloride
- Benzethonium chloride
- Cetalkonium chloride
- Cetylpyridinium chloride
- Cetrimonium
- Cetrimide
- Didecyl dimethyl ammonium chloride
- Dioctyl dimethyl ammonium chloride
- Dofanium chloride
- Domiphen bromide
- Methylbenzethonium chloride
- Tetraethyl ammonium bromide

Laundry advice

Property owners should check to see if their washing machine has a special wash cycle designed for sanitizing laundry. Many high-efficiency machines feature a sanitize setting. The sanitize cycle uses an extra-hot wash temperature and eliminates 99.99% of the most common bacteria found in clothes, sheets and towels. If the machine doesn't have a designated sanitize cycle, the recommendation is to use the warmest water temperature available. Sanitize cycles and hot water are harsher on clothes than regular cycles, so these should only be used when necessary.

Liquid bleach or other sanitizing ingredients should only be used when absolutely necessary to limit the impact to the good bacteria in septic systems.

About the author: Sara Heger, Ph.D., is an engineer, researcher and instructor in the Onsite Sewage Treatment Program in the Water Resources Center at the University of Minnesota. Heger is education chair of the Minnesota Onsite Wastewater Association and the National Onsite Wastewater Recycling Association, and she serves on the NSF International Committee on Wastewater Treatment Systems. Ask Heger questions about septic system maintenance and operation by sending an email to kim.peterson@colepublishing.com.

WASTEWATER AND CORONAVIRUS (COVID-19): WHAT ARE THE RISKS?

Author: Sara Heger, Research Engineer and Adjunct Assistant Professor, Onsite Sewage Treatment Program
Water Resources Center University of Minnesota

Created 03/20/2020

Here is what we don't know yet

COVID-19 concentrations and survival in feces, sewage or water are currently unknown. The virus that causes COVID-19 has been detected in the feces of some patients diagnosed with COVID-19. The amount of virus released from the body (shed) in stool, how long the virus is shed, and whether the virus in stool is infectious are not known. According to research conducted by the Washington Onsite Sewage Association, the aerosolization of sewage through standard methods of pumping pose the greatest unrecognized risk to workers as they found the act of opening the lids on tankage and lifts stations exposed workers to aerosolized pathogens. The risk of transmission of COVID-19 from the feces of an infected person is also unknown. However, the risk is expected to be low based on data from previous outbreaks of related coronaviruses, such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). There have been no reports of fecal-oral transmission of COVID-19 to date. SARS has been detected in untreated sewage for up to 2 to 14 days. In the 2003 SARS outbreak, there was documented transmission associated with sewage aerosols.

How to protect yourself, your workers and your families

Operators and SSTS professionals performing essential tasks need to protect public health and safety and must continue to work during this outbreak and therefore it is critical that they do so safely. Wastewater professionals must be provided proper personal protective equipment (PPE), be trained on how to use it, and hand washing facilities/waterless sanitizers. Workers should avoid touching their face, mouth, eyes, nose, and open sores and cuts and not chew gum or tobacco while handling sewage. Workers should wash hands with soap and water immediately after removing PPE or use waterless sanitizers. Do keep in mind that waterless hand sanitizers are not as effective on hands that are dirty with grime and grit therefore it is advisable to use soap and water prior to eating or drinking. The following PPE is recommended for workers handling human waste or sewage:



- Goggles to protect eyes from splashes of human waste or sewage.
- Protective face mask or splash-proof face shield to protect nose and mouth from splashes/ aerosolization of human waste or sewage. Depending on the type of work this could include N95 masks with a verification of "face fit" testing for the employee including the limitation of facial hair.
- Liquid-repellent coveralls to keep human waste or sewage off clothing.
- Waterproof gloves to prevent exposure to human waste or sewage.
- Rubber boots: to prevent exposure to human waste or sewage. Keep in mind that wastewater professionals in high-risk categories due to age, underlying health issues or have family members at risk should be particularly careful working around untreated sewage. Therefore removing work clothes before returning home is advisable.

What about all this toilet paper?

Toilet paper is designed to be flushed and, as long as used in normal amounts, will not cause an issue in WWTP or septic systems. Sanitizer wipes should NEVER be flushed down a toilet (including those labeled flushable). If due to shortages of toilet paper people need to utilize other paper products such as paper towels or facial tissues these items should be placed in the garbage, NOT the toilet.

Is your water safe to drink?

The simple answer is yes. The virus that causes COVID-19 is not spread through drinking water, and the World Health Organization says it hasn't been detected in any water supplies. Conventional water treatment removes or inactivates the virus. There is no need to buy bottled water.

NEED INPUT FROM INDUSTRY! O2WA WANTS TO HEAR FROM YOU.

Survey will be landing in your email box. Pat McVay

Under these unusual times we would like our members input as we move forward.

O2WA Survey Questions

- Will you attend the 2021 Annual O2WA Conference held in Bend?
Yes ___ No ___ Maybe ___
- Will the Covid 19 Virus keep you from attending the conference?
Yes ___ No ___ Maybe ___
- Would you attend a video conference with benefits of CEU and access to vendors?
Yes ___ No ___ Maybe ___
- What is your primary relationship with the onsite industry?
Engineer/Designer ___ Regulator ___ Installer ___ Service Provider ___ Manufacturer/Supplier ___
- What percent of your business is in the onsite industry?
80% -100% ___ 60% - 80% ___ 50% ___ Less than 50% ___
- Looking to the future where do you see your business in the onsite industry?
Growing ___ Declining ___ Staying the same ___
- Where would you like to see emphasis of the conference?
- Are you a current member? Yes ___ No ___
- What can O2WA do to benefit / help your business?

This survey will be emailed to take online. If you wish—take a copy and mail or email the above.



UPCOMING TRAINING CLASSES - For complete list go to www.OESAC.org

Initial Certification Courses @ Chemeketa Community College

<https://www.chemeketa.edu/programs-classes/training-certificates/customized-training/deq-maintenance-provider/>

Installer

***Alert:** Due to the COVID-19 the DEQ Installer course will be online/live webinar at least through June. Class size is limited, so we are holding classes more frequently during this time period.

Course: DEQ Initial Installer

Monday, July 20, 2020

Monday, July 27, 2020

Monday, August 17, 2020

Monday, August 24, 2020

Monday, September 21, 2020

Monday, October 19, 2020

Monday, November 16, 2020

Maintenance Operator

***Alert:** We are currently exploring how to provide this class online. Content makes it very challenging, but we are researching ways to provide this course. Stayed tuned to this site for updates for as they are available.

Course: DEQ Initial Maintenance Provider

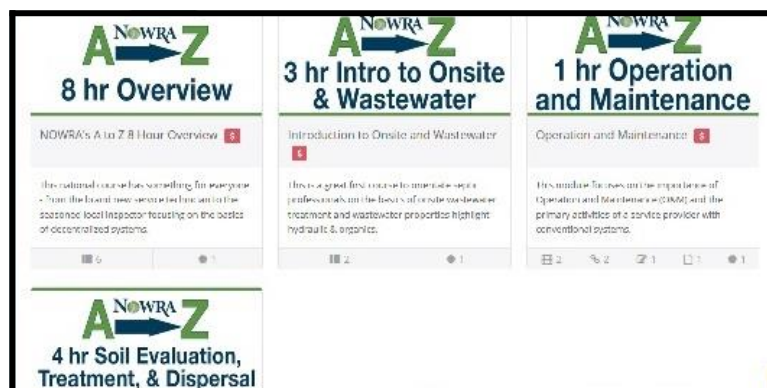
Monday and Tuesday, August 17 and 18, 2020

Monday and Tuesday, November 2 and 3, 2020

NOWRA Online Learning Academy -

- Operation and Maintenance (1 hour)
- Introduction to Onsite and Wastewater (3 hours)
- Soil Evaluation, Treatment & Dispersal (4 hours)
- NOWRA's A to Z 8 Hour Overview (8 hours)

Visit www.pathlms.com/NOWRA to get started!



ROLES OF REGULATORS AND CONSULTANTS IN CHALLENGING SITES

by Bob Sweeney, REHS Environmental Management Systems, Inc.

Recently, a client's attorney asked me to respond to some questions as to whether the DEQ Agent was being "overzealous" and therefore unnecessarily delayed the progress of their project. Our firm got involved after others had tried and failed to gain approvals for individual lots in a proposed subdivision. The client's civil engineer had not done a lot of work on challenging septic systems and the engineer and client were frustrated, when the desired results were not forthcoming.

As a former regulator for 20 years and now consultant for the past 23 years, I have mixed feelings. A careless response can have unintended consequences for all parties. Any response can show up in court. I had to reply that "I will need to consider this before responding further". I too can be frustrated by regulatory decisions.

Where an applicant pays a fee for a feasibility report, but does not get the desired approval, does the applicant have grounds for a complaint? Questions arise:

What is the legitimate role of government agents in providing services for a fee?

What is the legitimate role of private consultants, paid to produce a result?

The answer is not quite that straight forward. In both regards, the level of applicant / client satisfaction depends greatly on the perceived deliverable.

Is the government hired to produce a favorable feasibility report? Answer: "No". The government is tasked with preventing the adverse impacts from improperly sited, designed, installed and maintained sewage systems. Whether "fee for service" is the right tool can be debated at another time. Regardless, the Agent does not have the time or responsibility to find solutions or de-

conflict project components. Applicants need to understand this or they will often feel cheated and frustrated.

Is the consultant hired to produce a favorable feasibility report? Answer: "Yes, but . . .". The designer is tasked with working to gain approval for projects, but does not have the authority to approve sites and permit systems. Further, the designer needs to work with the site conditions and rules to try to find a suitable solution so that the DEQ Agent can make the appropriate decision.

Additionally, there are always different ways to approach a site and design. The overlapping roles of regulator and designer can be a source of conflict, delays, cost escalation and the resultant frustration. It is our industry's responsibility to advise our clients / applicants so that they understand that reality or they will often feel cheated and frustrated.

That said, we as a community and individual practitioners do need to work together to attempt to adequately address site challenges. We can help our clients / applicants as they enter and navigate a sometimes-tortuous route, and to make informed decisions as to whether and how to continue.

We are in the unique position of understanding client interests and needs, while also possessing a strong understanding of applicable rules that DEQ and their agents are obligated to enforce. To the extent we facilitate the process with our knowledge of both sides' interests and requirements, we can help make the approval process smoother for everyone.

HOURS OF SERVICE DRIVERS FINAL RULE

DEPARTMENT OF TRANSPORTATION Federal Motor Carrier Safety Administration Update May 14, 2020

FMCSA revises the hours of service (HOS) regulations to provide greater flexibility for drivers subject to those rules without adversely affecting safety. The Agency: (1) expands the short-haul exception to 150 air-miles and allows a 14-hour work shift to take place as part of the exception; (2) expands the driving window during adverse driving conditions by up to an additional 2 hours; (3) requires a 30-minute break after 8 hours of driving time (instead of on-duty time) and allows an on-duty/not driving period to qualify as the required break; and (4) modifies the sleeper berth exception to allow a driver to meet the 10-hour minimum off-duty requirement by spending at least 7, rather than at least 8 hours of that period in the berth and a minimum off-duty period of at least 2 hours spent inside or outside of the berth, provided the two periods total at least 10 hours, and that neither qualifying period counts against the 14-hour driving window.

DOT is committed to ensuring that information is available in appropriate alternative formats to meet the requirements of persons who have a disability. If you require an alternative version of files provided on this page, please contact FMCSA.PublicAffairs@dot.gov

FACTSHEET PROVIDED BY DEQ

HYDROSPITTERS—EQUAL DISTRIBUTION ON A SLOPE



An accessible and well-marked hydrospitter. Photo courtesy of Brian Rabe, Cascade Earth Sciences

What is a hydrospitter?

A hydrospitter is a device that distributes wastewater under pressure through the use of two or more orifices and pumping from a dosing tank or chamber in a pressure transport pipe, as well as gravity flow to trenches.

Comprised of plastic components, each hydrospitter is designed to meet the specific needs of an application.

When to use a hydrospitter?

Sloped sites may need hydrospitters to achieve equal distribution. Hydrospitters should be used to receive effluent by pump to distribute to gravity drainfield laterals of varying lengths and elevations. An accessible and well-marked hydrospitter.

Design considerations

A hydrospitter will require periodic maintenance for the life of the system. The unit must be accessible for cleaning and removable for inspection or replacement.

Hydrospitters have disks with orifices sized to distribute an equal proportion of effluent based on gallons per foot to each trench. Orifices should be as large as practicable, minimizing potential for blockages, and not smaller than an eighth of an inch. Soon after startup, residual debris, such as shavings and glue, may clog orifices and should be checked early on. Size orifices to proportionally distribute to each trench, determin-

ing the size by specific calculations. Drill orifices smooth and straight. The orifices will need at least two feet of head pressure. Disks must be removable for cleaning.

Other designs may be considered on a case-by-case basis. Design necessities include, ability to be monitored and maintained. The distribution should also be proportionate so its use would not create a public health hazard.

Pipe considerations

Show the size of the pipe connected to the hydrospitter on construction plans as it is an important design consideration. Smaller diameter pipes can fill completely and create a vacuum, which will have one or more lines siphoning effluent. Instead, transition to larger gravity piping outside the hydrospitter enclosure.

Siting considerations

Place hydrospitters in an enclosure with a lid and a solid floor to restrict access for rodents while also protecting unions and valves from soil. Opening unions or valves can be difficult or impossible when soil particles get into them. Place a drain hole in the lower part of the enclosure to drain condensation. Insulate the enclosure where freezing is a concern. Exercise care when working in here, as spiders, scorpions and other stinging insects may be residing in this enclosure.

Locate the top of the hydrospitter pipe at least 6 inches higher than the top of the header pipe of the uppermost trench, ensuring the appropriate proportional flow to each trench.

Each discharge pipe must discharge into a distribution box, drop box or other method acceptable to the agent as a means of monitoring system performance. The flow from each orifice should not vary more than 10% from its design rate.



SEPTIC TANKS



RepCo
SALES AGENCY

(503)-720-7186

www.repcosalesagency.com
sales@repcosalesagency.com



EFFLUENT PUMPS

SEWAGE PUMPS

GRINDER PUMPS



JACKELTM
Trusted Since 1972

CHECK VALVES

SEPTIC LIDS

SUMP BASINS

SLIDE RAIL ASSEMBLIES



SEPTIC FILTERS

PUMP SYSTEMS

PRECAST PRODUCTS

RISERS & LIDS



ALARMS

FLOATS

PUMP PANELS



WASTEFLOW DRIPLINE

BIODISC FILTER

HEADWORKS



TURBINE EFFLUENT PUMPS



AIR PUMPS



SELF-CLEANING PUMP VAULTS

