



DOWRA

Delaware On-Site Wastewater Recycling Association

June 2007

Look What's Inside

On-Site Professional of the Year	2
O&M Certification	2
The Main Street Village	3
Clay Shoot	4
Safety in Your Workplace	4
Class H Guidelines & Inspection Form	5
PercRite® Drip Dispersal System	5
Changing the Way the World Does Wastewater	6
National Installers Certification	7
Ecoflex Packed Bed Textile Filter	7
Committee Updates	8
DOWRA.org	8
Aquaworx	9
Education for Realtors	9
Calendar of Events	10
Hot Topics	10

From the President

Too many times when you are involved in an organization you typically are quick to hear the negatives associated with it, but not the positives. However, when I recently had the opportunity to be interviewed by Gill Longwell of Cole Publishing, and when I spoke with Linda Hanifin Bonner the executive director of NOWRA, I was quick to hear praise. DOWRA in fact is more well known and recognized as a model association than I think we as an organization realize.

As part of a new series of articles for the installer which reviews state associations as a whole and their relationships with regulatory agencies, Gill jokingly spoke of how the slogan "it is good to be first" even applies to the wastewater industry. Unlike most states, the DOWRA board and its members form working partnerships which work with its members, state/local/federal agencies, and community to better the onsite industry as a whole. The DOWRA organization focuses on causes, effects and remedies leading to the establishment and refinement of regulatory development, professional trust, and proactive approaches.

According to Linda, DOWRA has proven to be an established organization which is demonstrated by its continued growth and sustainability in members. Education is the key to our future, and DOWRA has proven to be invaluable when it comes to providing educational opportunities. Through conferences, workshops, exhibits, del tech, and literature, DOWRA is able to reach all who are impacted by the onsite industry.

As President, I've had the opportunity to participate and attend numerous state and national conferences, and can attest that we are definitely a step above the rest. As an or-

ganization we have learned that change is necessary, and by working together it is easier to achieve a common goal than working apart. The DOWRA organization is successful because we are a committed "team organization".

In parting, it has been a great pleasure serving as your President. I can say that this has been one of the most rewarding things that I have been a part of and has impacted my life greatly. I thank you all for giving me this opportunity and look forward to still be active within the organization as my leadership role changes in January.

Hilary Moore

Watch your mail in late July for registration to the
**11th Annual DOWRA
Conference & Exhibition**

**On-Site Wastewater
Disposal....
The Ever Changing
Industry**

October 23 & 24, 2007
Delaware State Fairgrounds
Harrington, Delaware

**Celebrating the
Port-A-Potty**



On-Site Professional of the Year

Dallas Ray of Dallas Ray & Sons was the first recipient of the “On-Site Professional of the Year Award” presented on May 3, 2007 by Delaware Technical Community College. Dallas began his career in 1952 when he installed his first septic system in Texas. In 1989, Dallas received his Delaware license and has been installing septic systems ever since. Dallas was nominated for his commendable work in the on-site field as a contractor, as a community representative, and as a DOWRA board member. Dallas implements the golden rule of life in all of his work, and if there’s a problem he not only fixes it, but recognizes the situation so that it doesn’t happen again. Dallas is an educator to the community and to the regulators of the State. He uses his experience and knowledge to educate the homeowners on system awareness and the “dos and don’ts” of being serviced by an on-site system. Dallas is always willing to share his vast field experience with the local regulators in an effort to assist them in becoming better professionally as well as pointing out changes that are necessary in the field or permitting to better the on-site industry.

Other nominations for the 2007 award were Byron Jefferson, P.E., Carol Evans and Hilary Moore. Nominations were submitted by DOWRA members and DNREC licensees.

Call for 2007 working year nominations will be in February 2008. During this 2007 work year, please keep in mind your co-workers, peers and professionals who promote, better define and standardize the on-site wastewater industry. They too deserve to be recognized and commended for a job well done.

**Congratulations to the
“2007 On-Site
Professional of the Year”
Dallas Ray**



From left to right Mrs. Ray, Dallas Ray and Hilary Moore (President of DOWRA)

MARK YOUR CALENDAR!
December 9–14, 2007
Riviera Hotel
Las Vegas, Nevada

NOWRA
Presents the 3rd Annual
Installer Academy
LAS VEGAS
NEVADA

Schedule of Events

— DAY 1 —

Training Sessions — 8 am to 5 pm
Breaks throughout the day in the Exhibit Hall and breaks for lunch
Opening Reception — Exhibition Hall Opens at 5 pm
Meet and greet with other attendees and the exhibitors

— DAY 2 —

Training Sessions — 8 am to 5 pm
Breaks throughout the day in the Exhibit Hall and breaks for lunch
Networking Social — Exhibition Hall Opens at 5 pm

— DAY 3 —

Training Sessions — 8 am to 5 pm
Breaks throughout the day and for lunch

The 2007 INSTALLER ACADEMY will include:

- 3 days of technical sessions with CEUs featuring:
 - A to Z of Onsite Wastewater Treatment
 - Installation of conventional and non-conventional systems
 - Design and installation
- Business and financial management sessions
- Practical skills—e.g., OSHA standards, etc.
- Sessions with manufacturer training on products

This specialized Installer Training Program is what you need to succeed in business!



For more information: (800) 966-2942 or www.nowra.org/academy.html

Count on the Installer Academy every year, always in December, always in Vegas!

BORD NA MÓNA Provides O&M Certification

On February 13, 2007 and February 20, 2007 representatives of Bord Na Móna provided training classes in response to the January 1, 2007 DNREC “Operation and Maintenance” requirements which requires an operation and maintenance contract on all new innovative and alternative wastewater technologies. The class provided by Bord Na Móna was a certification class to train and certify operation and maintenance providers to inspect, operate, and maintain Bord Na Móna Wastewater Treatment Systems, also known as Puraflo Peat Filters. The class covered a general background and history of Bord Na Móna, the advantages of utilizing peat fiber media, wastewater sampling requirements and procedures, record keeping, and system inspection and check-out requirements. A field review of a Bord Na Móna unit was also performed at the Delaware Technical & Community College’s Environmental Training Center. Currently fourteen operation and maintenance provider certifications have been provided by Bord Na Móna within the State of Delaware.



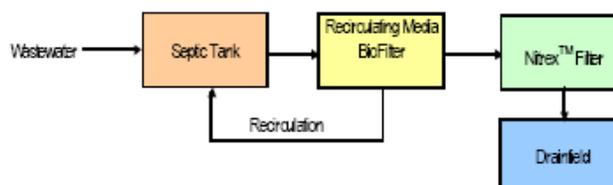
The “Bull” Port-a-Potty

Nitrogen Removal for Cluster Residential and Commercial Development, Main Street Village, Mashpee, MA (Cape Cod)

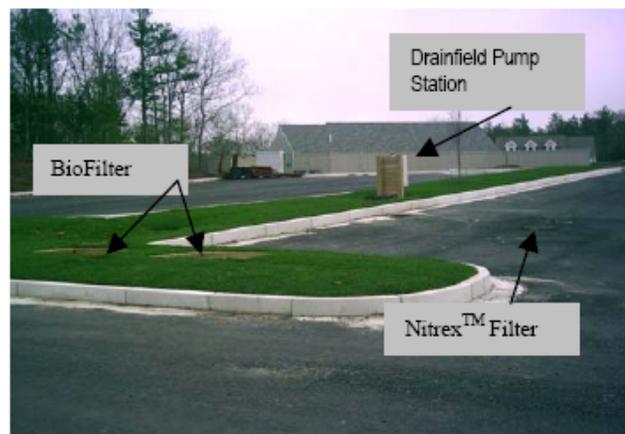
Pio Lombardo, P.E., President
Lombardo Associates, Inc.
Newton, MA
pio@lombardoassociates.com

The Main Street Village, in Mashpee, Cape Cod, MA, which has 24 housing units and small commercial space, was created with a 5,226 gpd design flow, community-sized wastewater treatment system. The wastewater system is located in a defined nitrogen sensitive area, a Zone II of a public water supply well. Zone II areas are contributing to a water supply well.

Mashpee Wastewater System Process Flow Diagram



The development is served with Town water and the entire Wastewater System includes a wastewater collection system, septic tank, and Recirculating Media Biofilter followed by a Nitrex™ Filter to reduce effluent total nitrogen prior to discharge to a drainfield. Permit effluent requirements are TN must be < 10 mg/l. The Wastewater System became operational in March 2006.



Mashpee, MA Wastewater System at Completion

After the start-up period, wastewater effluent TN levels have generally been < 3 mg/l. Effluent BOD and TSS are typically < 10 mg/l and < 10 mg/l, respectively.

Mashpee, MA Performance Summary

Date	Septic Tank Effluent Total Nitrogen (mg/l)	Nitrex™ Tank Effluent		
		Total Nitrogen (mg/l)	BOD (ppm)	TSS (ppm)
May 10, 2006	57.6	5	Start-Up Conditions	Start-Up Conditions
June 16, 2006	58	< 7 ⁽¹⁾	Start-Up Conditions	Start-Up Conditions
July 26, 2006	48.6	28	Start-Up Conditions	2
August 17, 2006	75.6	<3.0	27	9
September 14, 2006	67.28	2.15	24	3
October 17, 2006	62.29	1.6	10	1
November 20, 2006	47	2.08	7	<1
December 12, 2006	51	4.1	7	2
January 30, 2007	63	3.26	8	3
February 28, 2007	14 ⁽²⁾	6.27	7	<1
April 3, 2007	39	2.6	23.6	6
April 26, 2007	44	2.64	13.3	1
Average	52.28	3.53	14.1	2.9

(1) Due to insufficient nitrification of pretreatment system.

(2) High pH due to inappropriate wastewater discharge caused low total nitrogen.

Operations and Maintenance requirements consist of permit required monthly visits for treatment system performance sampling. Daily electrical consumption is approximately 5 KWHr, or \$0.75/day with electric costs of \$0.15/KWHr. Telephone connection allows remote monitoring of flow and notification of alarm conditions. No chemicals and no other utilities are required.

The wastewater treatment technology demonstrates that decentralized distributed wastewater systems can be as effective as centralized facilities in achieving the accepted limit of technology of TN < 3 mg/l, and is another tool for wastewater planners and engineers in nitrogen sensitive areas.



Annual Clay Shoot

The DOWRA Annual Clay Shoot was held on March 23, 2007 at Owens Station in Greenwood. This year's shoot raised over \$400.00 which will go towards the On-Site Professional of the Year Award. DOWRA would like to thank all of those who participated and made contributions. Without the local support, the event would not have been as successful.



The "Matrix" Port-a-Potty



Update

Safety in Your Workplace: Something to Talk About

By: John Thomas – WOSSA Executive Director

In early November, WOSSA hosted the two day National O&M training program for onsite systems. With a host of local expertise and Dr. Bruce Lesikar from Texas A&M, operations and maintenance issues were reviewed and discussed with over 70 attendee's. This program offers a sensible, systematic approach to documentation of all system components and technologies currently in the marketplace.

Included in the program were discussions on business ethics and safety. I was the presenter for the safety segment and thought I would share some things to think about as you go throughout your day. Safety doesn't happen by accident (pun intended). There are two elements that must happen. The first is a safety management plan. Depending on your work activities, you as a company owner have specific responsibilities under your version of Labor and Industry in your state. To paraphrase the General Duty Clause of the code.....you must provide for a safe workplace. It takes some effort to put an effective program in place.

In the presentation, we talked about safe behaviors and unsafe behaviors. Unsafe behaviors are the accidents waiting to happen. To set the stage, I asked the group this question. "How many of you have *never* had a speeding ticket? After a bit of hesitation, only one person raised her hand. I was really quite stunned, but then asked everyone, if the ticket received, modified the unsafe behavior of speeding? There was a lot of embarrassed smiles and chuckles, but I was really getting at the choices that people make, when unsafe behaviors are reinforced by positive feedback.....Here's an example.....those folks out on the highway that go over the speed limit by 10-15 miles an hour and pass a cop going in the other direction and he doesn't turn around to chase you.

- Unsafe behavior: Speeding.....
- Positive reinforcement for negative behavior: No Chasing, No ticket.....
- Rationalization: If I were going any slower, I would get rear ended.....

I know you have done it.....so have I.often several times a day. So when we put these choices in context to unsafe behaviors on the job, accidents tend to happen due to four root causes.

1. Eyes not on Path....ever tripped or slipped because you were walking backward dragging a hose or piece of equipment....
2. Eyes not on Tasksomething diverts your attention, the radio, a horn, the phone, someone in the shop yells to get your attention and your deeper into the bench grinder than you want to be.
3. Line of Fire....This is obvious, but as you are watching your cell phone drop out of your shirt pocket into the septic tank and you bend over and then get hit with the splash back. Do you have your safety glasses on?
4. Rushing...two more jobs to do, traffic backed up..... and now you back to making choices.

Of course the situation gets worse (or more predictable) when you start making choices with more than one of the above "root causes" in play.Rushing, eyes not on task, line of fire.....dominos.

Feel free to use this as a topic for discussion at your next tail-gate safety meeting!

Be safe.....someone is depending on you.

Class H Guidelines & Inspection Form

By: Jim Cassidy, Program Manager, GWDS

Since its inception, DOWRA has been the premier peer group for the Department when it comes to regulatory changes. These changes include the re-writes of the Regulations adopted in both 2002 and 2005, the O&M requirements for all I/A systems that went into effect this past February and the on going work with the Class H Inspection Guidance Document and the revamping of the Class H Inspection Form.

When I refer to DOWRA as a peer group, I mean a concentrated group of industry professionals, from all facets of the on-site field, that come together and work with the Department to iron out the wrinkles in proposed regulatory changes.

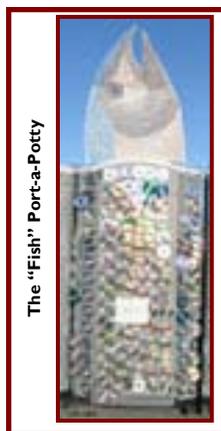
The Department and DOWRA met for the first time, regarding the Class H issues, in December of 2006 talking over what the members thought were necessary components to a good inspection and making changes to the existing "Draft" inspection form contained in the Regulations. A second meeting was held on May 9, 2007. The DOWRA "strike force" came in very well

prepared as always. I jokingly refer to them as a strike force because there were only a couple of them but they had put together comments for several members and presented them in a concise and organized manner that made it simple to work with. It was easy to see that they were confident in speaking for the membership as a whole.

The one true sticking point during the entire discussion centered around the necessity for an open trench inspection, actually excavating the soil above the stone trench or bed to observe the depth of ponding water in the drainfield to determine functionality. DOWRA asked that the sources of this section of the inspection be revisited and re-evaluated. After the May meeting, NAWT and PSMA were contacted and softened their stand on the necessity for open trench inspection in favor of probing and visual factors being used as indicators. Once again, the voice of the industry prevailed, the open trench requirement has been dropped from the Guidance Document, unless probing, visual inspection or other aspects of the inspection warrant the more intensive scrutiny of the drainfield.

After the May meeting, the documents were again reworked to encompass the comments from within the Department and DOWRA. The latest version has been given to Department staff as of June 1st and to DOWRA members at the June 12th Board meeting. I hope to have all of the comments from DOWRA Members and DNREC Staff by the end of June so that the final round of workshops can be scheduled for late summer. In hopes that the Guidance Document and new inspection report can be put into use soon.

As a side note, I was recently made aware that we here in Delaware are a very rare group. It seems that there are not many state jurisdictions that actually take input from the private sector into consideration when making new or amending old regulations. I personally feel that to discount the thoughts and opinions of the licensed community is a waste of one of the most valuable assets that we have and speaking for the Department I thank the DOWRA membership for their contributions to the regulatory process.



The "Fish" Port-a-Potty



The "Tree Bark" Port-a-Potty

PercRite® Drip Dispersal System

American Manufacturing Company, Inc., manufacturer and supplier of the PercRite® drip dispersal system is pleased to announce an expanded relationship with Freemire & Associates of Harman's, Maryland.

American Manufacturing has been distributing and servicing drip dispersal systems in Delaware since 1993. Due to the exceptional growth in the on-site wastewater industry and with the implementation of the mandatory operations and maintenance guidelines for alternative systems American Manufacturing has expanded the territory of Freemire & Associates to include all of Delaware.

Freemire & Associates has been representing American Manufacturing for two (2) years in Maryland. With their two locations in Maryland and Delaware they will be able to provide exceptional customer service and technical support for PercRite® systems as well as acting as the primary distributor.

Jim Williams of Freemire & Associates will handle questions relating to product application, service and, of course, orders. He is backed up by an exceptional team of field service personnel who have all received extensive training in the PercRite® drip dispersal process.

American Manufacturing's national sales manager, Eric Valentine, would like to thank everyone for the exceptional growth and support that has necessitated this change and to assure everyone that American Manufacturing will continue to be involved and available.

If anyone has questions they may contact Jim or Eric at:

Freemire & Associates
Jim Williams
302-492-3915
depumpman@aol.com

American Manufacturing Company, Inc.
Eric Valentine
800-345-3132 ext. 102
evalentine@americanonsite.com

Changing the Way the World Does Wastewater

In New Zealand, AdvanTex® Reduces Nitrogen the Best

Orenco News Release, Release Date Oct. 30, 2006
Contact: Sandra Huffstutter, Corporate Communication Manager

Sutherlin, Oregon, October 30, 2006 – The results are in from the Bay of Plenty in New Zealand, and they confirm that numerous other third-party field trials have already demonstrated. Namely, that a residential wastewater treatment technology from Orenco Systems significantly and reliably reduces nitrogen in household wastewater. The conclusion of New Zealand's 11-month study (May 2005-April 2006) states the following:

"The Innoflow supplied system (Orenco AdvanTex® AX20) achieve a median TN of 13 g/m³ (13 mg/L) for the period week 16 to 55, with TN removal efficiency better than 88% at its peak performance (Figure 4). This was the only system to consistently remain under the 15 g N/m³ (15 mg/L) target."

Similarly, third-party data from testing Orenco's nitrogen-reducing AdvanTex® systems at two ongoing EPA demonstration sites—La Pine, Oregon and Green Hill Pond, Rhode Island—show that these systems produce effluent with Total Nitrogen that averages 17 mg/L and 18/mg/L, respectively. And third-party data on similar AX20s tested since 2003 for the Virginia Department of Health show that properly operated systems (i.e., the ones *without* water softener backwash plumbed into the system) are producing effluent with Total Nitrogen that averages 16 mg/L.

As a result of the product's nitrogen-reducing performance, AdvanTex® is currently approved in six states where onsite systems are required to reduce nitrogen to 20 ppm or by 50 percent.

According to Terry Bounds, P.E., co-owner of Orenco and the lead developer of AdvanTex® technologies, "Manufacturers can design and produce onsite wastewater treatment systems that simply and effectively reduce typical residential effluent nitrogen below 20 mg/L—as AdvanTex® does—without supplemental nutrient removal processes. We will continue to focus our research on these simple methods, so that nitrogen-reducing technologies don't burden homeowners with unnecessary equipment costs or additional operation and maintenance costs."

Orenco Systems is a 25-year-old company headquartered in Sutherlin, Oregon, that designs and manufactures decentralized wastewater solutions for individual homes and entire communities. Readers who would like more information on Orenco's nitrogen-reducing AdvanTex® Treatment Systems can go to the company's web site at www.orenco.com, where there's a link on the home page for a free AdvanTex® DVD.

**Check out the DOWRA booth
At the Delaware State Fair
July 19 - 28
Under the Grand Stand**

**Watch your mail in August
for registration information for the
Annual DOWRA Golf Tournament**

2007 Board of Directors

President ~ Hilary Moore
Hilary.Moore@state.de.us
302-739-9331

Vice President ~ Ken Walsh
MKS1@aol.com
302-436-8822

Past President ~ Carol Evans
caelnetml@aol.com
302-398-4951

Secretary ~ Carol Ohm
cohm@apexengineeringinc.com
302-994-1900

Treasurer / Academic ~ Brian Carbaugh
bcc-artesian@comcast.net
302-736-5245

Installer ~ Gusty Voshell
GustyHu@aol.com
302-284-0354

Manufacturer ~ Eric Valentine
Evalentine@americanonsite.com
703-754-0077

Pumper ~ Wayne Hudson
peninsula@ddmg.net
302-684-4723

Soil Scientist ~ Jack Hayes
John.Hayes@state.de.us
302-739-9327

Operator ~ Sam Schlegel
sschlegel@tuiwater.com
302-945-0196

Supplier / Wholesaler ~ Kevin Sockriter
kevinncp@verizon.net
302-349-5528

VIP ~ Niki Evans
firelady49@aol.com
302-359-2210

Engineer ~ Scott Pinder
smpinder@riverbasineng.com
302-644-6730

Class H Inspector ~ Ben Miller
bmiller@ecieng.com
302-226-2844

Regulator ~ Jim Cassidy
James.Cassidy@state.de.us
302-856-4561

By: Jim Cassidy, Program Manager, GWDS

As you all may remember from the January 07' newsletter, I was talking about taking the National Environmental Health Association (NEHA) installers certification test in February at the Pumpers and Cleaners Expo. Well I did and let me tell you, if you plan to take the test, you had better have your "A" game working that day.

I mentioned that NEHA exams were "known to be thorough and definitely not the easiest" and this one definitely lived up to expectations. I took the "Advanced" examination with 125 questions and figured that I got the easy ones right and lucked my way through enough of the hard ones to get by. Yes I did pass but I sure didn't ace the thing, I got about 100 answers right, 80% and had to think about almost every question and actually do some doodling on

scratch paper to determine answers to some of the elevation questions.

The questions ranged from some relatively simple questions about components to some really involved questions about changes in ground elevation and percentage of fall being converted to inches of drop in a pipe run. There were questions about; ATU's and the different types of emitters used in micro-drip irrigation systems on sloping terrain, backfilling plastic septic tanks and practical construction practices during installations. So as you can see they ran the gamut.

I think the easiest part about the test was signing up to take it. Go to www.neha.org and look for the credentials area and head for the Certified Installer of On-Site Wastewater Treatment Systems spot and read about the test and where it's going to be given in the future. This is also the best spot

to keep up with locations where you might have the opportunity to take the exam.

I am pretty sure I am the only person in the State that has taken the test so far. I am hoping that someone else will take it sometime soon so we can compare notes and see if the test really was that challenging or if it was just me. Its been a while since I installed systems everyday.



Ecoflex™ Packed-Bed Textile Filter

Premier Tech Environment, manufacturer of the Ecoflo® peat based biofilter, has developed the Ecoflex™ packed-bed textile filter for the reduction of nitrogen in wastewater. Ecoflex™ is a composite filter made of an organic layer and a synthetic layer sandwiched and rolled around a 2" diameter tube to form a filtering media roll. Each filtering media roll is then either inserted individually in a watertight polyethylene tank or installed in a cluster in a prefabricated concrete or fiberglass tank. Ecoflex™ can be used to treat volumes of 500 to 25,000 gpd in residential, commercial and community systems with total nitrogen removal approaching 70%.

For nitrogen reduction Ecoflex™ utilizes biological conversion of nitrogen compounds to nitrogen gas and is designed as a recirculating system with septic tank pretreatment, followed by an anoxic/dosing tank, then Ecoflex™ units and finally discharge.

The benefits of the system include:

- Incorporation of material of different porosity optimizing the flow of water to be treated.
- Increased oxidation capacity: 3 to 4 times that of media in bulk.
- Compact size
- Physical treatment by filtration providing a barrier to sloughing and burping.
- No odor or noise
- No compaction of media.
- Surface area of 5.4 ft² (0.5 m²)/roll.
- Height of only two (2) ft (600 mm).

Ecoflex™ is the most advanced and reliable textile filter for single-family homes, commercial applications, high strength and community systems.

For more information, please contact:
Ecoflo® of DE/Falling Spring Technologies
www.ecoflode.com
877-4ECOFLO (877-432-6356)

DOWRA is proud to be a member of

NOWRA

www.nowra.org

Committee Updates

Education Committee

- Completed real estate class for EXIT First Choice Realty
- Working to complete class and presenter application to the Delaware Association of Realtors
- Completed "Who We Are" brochure (Can be found on the website)
- Participated in the Rural Water Conference
- Will be participating at the Delaware State Fair in July
- Currently working on "Septic Help" brochure
- Possible "National Concrete Class"

DNREC/DOWRA Partnership

- Assisted with redefining requirements of the Class H Guidance Document and Inspection Report
- Met with Sussex County Engineering Office on defining the requirements for large/community on-site systems

Website Committee

- Created new format for website that is more informative, professional and maneuverable. Documents for all events, brochures, members and contacts can now be found at www.dowra.org.

Membership Committee

- Completed membership directory.
- Completed written member survey.
- Currently in process of surveying non-renewing members.

By laws/Policy Committee

- Created and adopted Presenter Policy.

Events Committee

- Hosted Clay Shoot.
- Next event will be Member Appreciation Crab Feast in August.

Conference Committee

- Secured location and in process of securing exhibitors and presenters

As always if you wish to participate on any committee please check out the website at www.dowra.org for details, or contact Hilary Moore at 302-739-9331.



Take a Look at DOWRA.ORG

This year DOWRA has reinvented their website to make it more informative, professional and user friendly. Please take a second to check it out, it now contains:

- An introductory home page stating DOWRA's mission
- A listing of our current Board of Directors and Committee Chairs with email links
- Information about our Annual Conference
- Calendar of Events
- Membership information with an application form
- Events link with information
- Septic Locator link
- On-Site Professional of the Year Award
- Newsletters link
- Links to other industry-related sites
- Simply Septics brochure





Infiltrator® Systems, Inc Announces the Formation of Aquaworx™

New Division to Offer Septic System Remediation

OLD SAYBROOK, CT (June 6, 2007) - Infiltrator Systems Inc. (Infiltrator), the national leader in onsite wastewater management, announces the launch of Aquaworx, a new division that will offer advanced treatment solutions. The first product being marketing by Aquaworx is the Aquaworx Remediator™.

This new initiative moves Infiltrator closer to its goal of being the complete onsite systems provider. Additional products will be introduced in the near term to complement Infiltrator's existing product lines.

"Infiltrator has been very fortunate over the years to have forged great relationships with regulators, distributors and installers who have helped us to better understand the needs of the onsite wastewater industry. It is our expectation that this new platform will grow as our customers' businesses grow and shift to more advanced technologies," says Roy Moore, President of Infiltrator Systems.

The Aquaworx Remediator is a simple, easy to install septic system remediation technology that renovates failing septic systems with minimal landscape disruption. This system is inserted into an existing septic tank of a malfunctioning system and reverses the drainfield clogging process. It is a permanent solution that requires minimal cost to operate and maintain. The Aquaworx Remediator was formerly marketed as the Pirana Aerobic Bacterial Generator by Piranaco.

Judd Efinger, General Manager of Aquaworx states, "The fastest growth segment in the wastewater industry is advanced treatment. The scarcity of easily developed land and the ever-present objective of cleaner water are accelerating this trend. Our goal is to elevate the acceptance of the advanced treatment segment by leveraging our sales and distribution networks with cutting-edge technologies. The Aquaworx team is looking forward to helping drive the movement toward a greener tomorrow."

Since its inception in 1987, Infiltrator has introduced innovative products that meet increasingly stringent environmental and regulatory onsite wastewater treatment requirements. Through its understanding of the marketplace - and the integration of engineering and manufacturing expertise, science, and technology - Infiltrator continues its leadership in the onsite wastewater market. The company provides installers, designers and property owners with superior, cost-efficient solutions to their onsite septic needs.

Infiltrator is the original and number-one plastic leachfield chamber in the onsite industry and is approved in all 50 states. In 2006, nearly one in three leachfield systems installed in North America was an Infiltrator Chamber System.

For more information or to download product and technical information, visit our website at www.infiltratorsystems.com or call 1-800-221-4436.



The Evolution



Of Travel...



DOWRA Provides Education for Local Realtor Offices

By: Ben Miller, ECI

As many of you know DOWRA strives to provide training and education to individuals within the on-site industry. We have also worked closely with different organization and governmental agencies to better the onsite industry within the State of Delaware. On February 8, 2007 DOWRA presented its first education classes to the EXIT First Choice Realty office located in Dover, Delaware. This education seminar lasted about 3 hours and covered several areas of the on-site industry. Topics such as: The DNREC Three Step Permit Process; a soils overview on what determines a type of system; what an onsite wastewater treatment and disposal system is and how it operates; types of distribution system; what the Class H Inspector License is and guidelines they should follow during an inspection; and the innovative and alternative system operation and maintenance requirements were covered during the class.

DOWRA has since decided that additional realtor education classes are something that we would like to provide and feel that it can be an integral part on expanding the knowledge about the on-site industry to the general public. DOWRA is currently creating two power point presentations, one presentation to be held at real state offices that will last about an hour, and one presentation to be held at the Sussex County, Kent County, and New Castle County Association of Realtors offices that will provide three hours of realtor continuing education credits.

DOWRA is currently seeking presentation volunteers and committee members to present the DOWRA presentation at the realtor education classes. We would like a few volunteers from each county. If you are interested in helping or presenting please contact Benjamin Miller at 302-422-8692 or bmiller@ecieng.com for more information.



P.O. Box 1696
 Dover, DE 19903
 Phone: (302) 739-9331
 Fax: (302) 739-7764
 Hilary.Moore@state.de.us

WE'RE ON THE WEB
www.dowra.org



The 'Castle' Port-a-Potty

Calendar of Events

July

July 19-28, Delaware State Fair Exhibit
 Grandstand, Delaware State Fairgrounds, Harrington, DE



August

August 16, DOWRA Membership Appreciation Crab Feast
 Invite only
 6:00 pm, Seafood City, Felton
 ** All those who attend board/membership meetings will be invited.

September

September 11, DOWRA board/membership meeting
 6:30 pm pizza, 7:00 pm meeting starts
 Board Room, Exhibit Hall, Delaware State Fairgrounds, Harrington, DE

September 14, DOWRA Annual Golf Tournament
 12:00pm, at Jonathans Landing Golf Course, Magnolia

October

October 23 - 24, 11th Annual DOWRA Conference & Exhibition
 Delaware State Fair Grounds, Harrington, DE

To access the **NOWRA** Septic Locator

Log on to www.septiclocator.com

Hot Topics....

Inland Bays Pollution Control Strategies http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm

The Department of Natural Resources and Environmental Control has published its proposed Inland Bays Pollution Control Strategy in the Delaware Register of Regulations, making the newly revised strategy available for public review.

Public hearings on the topic were held on June 13th at the Millsboro Senior Center, 322 Wilson Highway, Millsboro; and on June 14th at the Georgetown CHEER Community Center, 20520 Sand Hill Road, Georgetown.

The proposed pollution control strategy for meeting water quality standards was developed after extensive meetings and discussions with the scientific community, the public and a broad range of stakeholder groups.

The strategy would also require enhanced nutrient removal from onsite wastewater systems of all sizes. Implementation of the advanced nitrogen removal for small individual septic systems will be required beginning in January 2015. The plan also calls for man-

datory inspections on all onsite systems.

Senate Bill #77 w/SA 2 www.legis.state.de.us

An act to amend Title 26 of the Delaware Code concerning municipalities providing wastewater service outside their municipal boundaries and the criteria to be used by the public service commission for granting certificates for public convenience and necessity to wastewater utilities.

House Bill #30 www.legis.state.de.us

An act to amend Title 7 of the Delaware Code relating to the Delaware land Protection Act. This Bill expressly prohibits the application and/or injection of wastewater or treatment wastewater or disposal of biosolids and/or sludge from sewage treatment facilities on state lands.

Tax Ditches & On-Site Systems

Tax Ditches are used to assist in draining an area of surface water and have associated

maintenance and/or construction right of ways (ROW). Neither structures nor on-site wastewater treatment and disposal systems are supposed to be located within a tax ditch ROW. Therefore it is important to determine the extent of the ROW associated with the tax ditch when planning the location of a disposal system. If there're are questions as to whether the area proposed for a disposal system is located within a tax ditch ROW, it is suggested that information from the Division of Soil and Water Conservation Drainage Program be requested. You may email DNREC_Soil_TaxDitch@state.de.us with questions.

Sussex County

Sussex County is currently developing requirements pertaining to large/community systems. These include isolation distance requirements from all system types and components.