

DOWRA  
P.O. BOX 1696  
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# DOWRA NEWS

Delaware On-Site Wastewater Recycling Association

Volume 1, Issue 1

January 2008

New  
2008 Conference  
Location!!

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## 2008 Change in Leadership

With a new year, comes a change in leadership for the DOWRA organization. The DOWRA board is pleased to announce that Ken Walsh and Jim Williams have accepted the positions of President and Vice President for the 2008 and 2009 calendar year.

Ken Walsh is the owner of Multi Koastal Inc. and brings over 20 years of experience in the wastewater industry as a Class A, E, B and H licensee. He prides himself on doing what is right for the environment and assisting in setting, and keeping high industry standards.

Ken stated he was honored to be chosen as President, as the industry is facing challenging economic times and looks forward to upholding the integrity of the organization. Ken also plans to expand what DOWRA currently offers the members.

Jim Williams brings over 15 years of experience in the wastewater industry to the board. He currently works for Freemire and Associates as a service manager and salesman representing their full pump product line as well as the Bio-Microbics Pre-Treatment line. Jim also believes that education is a key element to a successful business and has been involved in many educational seminars, presentations, and hands on training classes.

When asked how he felt about being elected Vice President, Jim stated, "I am pleased to have the support of the organization and am ready to work very diligently to uphold the members needs."

Both would like the members to know that they may be contacted at any time to discuss industry issues. They also encourage and invite all members to attend the quarterly membership meetings and to become involved on a committee. Committee information may be viewed on line at [www.dowra.org](http://www.dowra.org).

## Nominations for On-Site Professional of the Year Sought

The "2007 On-Site Professional of the Year Award" will be conducted from 11 a.m. – 1 p.m. on Thursday, May 1, 2008 at the Carter Partnership Center, Room 540, Delaware Technical & Community College.

All nominees will be honored with a Performance Recognition Certificate, and the awarded winner will receive a Recognition Plaque with a \$500 check.

Anyone may submit a Letter of Nomination. In submitting a letter, nominators are

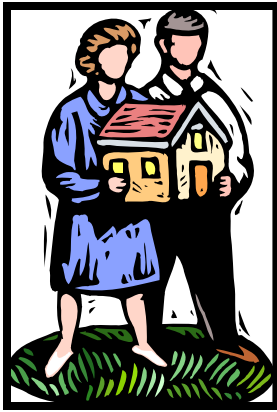
asked to: Include his or her full name, business title if appropriate, and a contact phone number

Nominees during the competition year (2007) must be either: a DOWRA Member, a DNREC licensed professional in the on-site industry, and/or Regulator or academic professional associated with the on-site industry. The nominee's performance record must show a consistent and above average dedication to the betterment of the environment.

Nomination letters must reach Del Tech by March 7, 2008, for review by the Award Committee. An effective nomination letter will refer to individual accomplishments, work ethic, teamanship, vision, dedication, etc.

All letters must be submitted to:

Delaware Technical & Community College  
Attn: Jerry Williams  
Environmental Training Center  
P.O. Box 610  
Georgetown, DE 19947



**“ A Happy  
Client is a  
Repeat Client  
that Provides  
Referrals”**

### **On the Job Homeowner Education** *submitted by Ben Miller*

On the job homeowner communication and education is a great way for on-site contractors to gain referrals, repeat business, and a good working business name. In today's competitive and slow market conditions many of the small on-site professionals and businesses need every edge they can get to remain functional. With the current housing slump it is not feasible to raise service prices to attain needed income to cover expenses; therefore it is essential to find different ways to stay ahead of the competitors. One way to gain the competitive edge is to provide clear communication to clients and to educate them while providing your services. Use your knowledge and gain the trust and respect from your current, future, and potential clients. You can use some of the following simple techniques to improve your services and customer service:

- Listen to the client needs and questions.
- Look at them, pay attention, and don't talk over them. This will make them feel more comfortable and feel like you will address their needs.
- Return phone calls in a timely fashion.
- If the client feels like your not going to address their needs, they will call someone else.
- Explain and show the owner their system and give a brief synopsis of how the system works.

The following is a simple general overview that can be used.

- Wastewater leaves the house and goes into a septic tank.
- The septic tank allows solids to sink to the bottom and oils and grease to float to the top.
- Clear effluent from the middle flows through a filter into the distribution box or dosing chamber. **(The filter needs to be cleaned every so often and should not be thrown away. It is there as an indicator when the system may need to be maintained. It helps prevent system failure and costly system repairs.)** Show them how to clean it, offer to provide a scheduled service for a fee, or recommend someone within the industry that provides this service.
- Wastewater then flows into a distribution or pump tank.
- The D-box allows the effluent to be distributed evenly throughout the drain field.
- A dosing tank also provides distribution and allows elevation changes (up hill or long distances) to be over come.
- Explain that there is an alarm and a timer. Show them how to silence the alarm. Explain that with a timer effluent is sent out to the drain field on a schedule; generally 3 or 4 times a day. Let them know that if the alarm goes off it may not mean that there is a problem and that the alarm light should go out over the next day or so. Explain they should spread their water use throughout the day and week. Let them know that if the alarm is sounding frequently that this may indicate a problem and that the timer, floats, or pressure adjustments may need to be made. **(The timer should not be put on override. The timer prevents too much water being sent to the disposal area. It is also an indicator when the system may need to be maintained. It helps prevent system failure and costly system repairs.)**
- Effluent is then distributed into the drain field. The size of the disposal area is based on how fast water will move through the soil and by water use. The disposal area is made up of a series of pipes located within a bed or trench filled with stone. The disposal area provides additional cleaning of the effluent before it reached the groundwater.
- Be confident while you are speaking. It is also ok if you do not know an answer to a question. Be honest! "I don't know but I will find out for you." Be sure to follow-up) or "Here is a number for someone that would know."

I hope you find some of these suggestions helpful. Remember a happy client is a repeat client that provides referrals.

## MDE Releases 2<sup>nd</sup> RFP Grant Application for Bay Restoration Program Funding for On-site Sewage Disposal Systems

Linda Hanifin-Bonner

On November 27, MDE officially announced its second Request for Proposals (RFP) for county, municipal and state government agencies to apply for grants to pay for the costs to upgrade traditional septic systems to an onsite system with nitrogen-removing technology. Money for this program comes from the Bay Restoration Fund.

Signed into law on May 26, 2004, the Bay Restoration Fund (BRF) requires all users of onsite sewage disposal systems ("OSDS"), also referred to as septic systems, to pay a \$30 per year fee. Sixty percent (60%) of the money collected is designated for use to upgrade septic systems to Best Available Technology ("BAT") in nitrogen reduction. The remaining 40% helps implement Maryland cover crop programs.

Through the BRF, a total of \$12.6 million per year will be available for the septic upgrade program. Initially, those systems designated as failing which exist within the designated "Chesapeake Bay Critical Area" or the "Maryland Coastal Bay's Critical Area" are given priority. The grant money is only available for the portion of costs used to upgrade existing systems to best available technology for nitrogen removal, or for the cost difference between conventional septic systems and those systems using the nitrogen-reducing technology.

### Service & Maintenance requirements

MDE also believes that operation and maintenance, at a level appropriate to ensure long-term management, as well as project identification and data collection are an essential part of the system upgrades. Applicants may request funds for reasonable costs associated with implementing an appropriate level of O&M management. This includes regularly scheduled inspections and operation and maintenance services. All funded systems will be part of an evaluation and monitoring program to ensure they are perform as designed and reliably treat wastewater.

Applicants' proposals must include a budget or an accounting of the funds requested. Applicants are advised that the BRF grant to property owners may cover the initial cost of purchasing and installing the BAT unit. The cost for the initial 5 years of operation and maintenance may also be included in the cost of purchasing the BAT technology. Costs of an entire OSDS replacement or repair and any material (gravel & pipe) and labor costs not directly associated with the BAT unit installation are not eligible.

Additional information and the full grant application are available on the MDE website.

[http://www.mde.state.md.us/assets/document/BRF-OSDS\\_rfp07.pdf](http://www.mde.state.md.us/assets/document/BRF-OSDS_rfp07.pdf)



***“Through the BRF, a total of \$12.6 million per year will be available for the septic upgrade program.”***

## DOWRA Announces 2008 Conference Change!



After four years of successful conferences at the Delaware State Fairgrounds, the DOWRA board is pleased to announce that the 12th annual DOWRA Conference & Exhibition will be held at the **Dover Downs Hotel and Casino**. This year's conference will hold a two tract presentation schedule while at the same time offering attendees the opportunity to network with exhibitors, much like past conferences.

**The conference will be held October 14 and 15! Keep on the look out for more information.**

## Welcome the New Board of Directors!

As the 2008 year begins, the DOWRA would like to welcome three newcomers and two re-elects to the Board of Directors. Each have volunteered to serve a three year term.

**Jim Williams** has accepted the position of Manufacturer. Jim has been with Freemire and Associates for the last seven years in which he has worked as a service manager and salesman representing their full pump product line as well as the Bio-Microbics Pre-Treatment line. Jim also utilizes his experience in providing educational workshops to licensees as well as working with industry leaders on shaping rules and regulations for the future.

**Laf Erickson** has accepted the position as Soil Scientist. Laf owns Atlantic Resource Management which is an environmental consulting, planning and permitting firm. Laf holds a DNREC Class D Soil Scientist license and has over 12 years experience in the on-site industry. Laf's expertise is on soil characterization and mapping; identification of seasonal saturation and/or seasonal high water table as exhibited by soil morphology for siting disposal systems, spray irrigation facilities, storm water management structures, farm ponds and subsurface engineering structures. He is proficient with estimation of soil permeability from soil properties by testing in the manner of standard, falling head percolation tests, and single and double ring infiltrometer testing.

**Hollis Warren** has accepted the position as Waste Hauler. Hollis has been in the pumping business in Delaware and Maryland for over 35 years. He has been the president of the National Association of Waste Transporters for 1995, 2000-2003 and is the current president. Hollis owns Warren's Wastewater Treatment Plant. He also has worked with the EPA on Land Treatment Rules and participated in the Steering Committee for Decentralized Wastewater Treatment.

## 2008 Board of Directors

**President ~ Ken Walsh**  
mks1@aol.com  
302-436-8822

**Vice President ~ Jim Williams**  
depumpman@aol.com  
302-492-3915

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

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

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

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

**Pumper ~ Hollis Warren**  
htwarrent430@aol.com  
302-284-9130

**Soil Scientist ~ Laf Erickson**  
laf@atlanticresource.net  
302-539-2029

**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

**Designer ~ Carol Evans**  
caelnetml@aol.com  
302-398-4951

**Engineer ~ Scott Pinder**  
SPinder@artesianwater.com  
302-453-6900X6209

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

**Carol Evans** has been elected as Designer. She brings over 21 years of experience in the on-site industry. Carol has served as the Vice President and President of DOWRA. She has been on the Board of Directors of DOWRA representing Designer and VIP. Carol currently holds DNREC Class A, B, E and H licenses. Carol also is NAWT certified.

**Kevin Sockriter** maintains the position of Wholesaler. Kevin is the Sales Manager for National Concrete and Products in Greenwood. He has been with the company for seven years. He maintains and establishes customer relationships in DE and MD. Kevin also markets their storm water, sanitary and septic product lines.

## Thank You!

The DOWRA Board would like to send a special thank you to **Eric Valentine, Jack Hayes and Wayne Hudson** for serving on the DOWRA board for the past three years. Your hard work and dedication is truly appreciated and you will be greatly missed!

## Septic Tank Effluent Filters *submitted by Hilary Moore*

State regulations have mandated the use of effluent filters in all disposal system installations since 2002. Most effluent filters are installed in the second compartment of the septic tank, but can also be installed as an individual filter system or inside the dosing chamber. Because filters come in a variety of manufacturers it is imperative to understand the

The primary purpose of an effluent filter is to organic content of the waste stream, therefore plain and simple, filters prevent additional solids removing solids that are larger than a 1/8 of an range are hair, lint, cigarette butts, etc.

Because of their purpose, all filters require regu-Maintenance intervals are determined based on the individual homeowner's habits. Some house-require cleaning during required septic tank from the tank, and the solids which have been

If the filters are not maintained regularly, it could potentially clog and create plugging up of the septic tank and cause the sewage to back up into the home. So if you receive a call in regards to backups, check the effluent filter first.



purpose and functionality of these filters.

decrease the amount of suspended solids and reduce the increasing the longevity of the disposal system. To put it from entering the drainfield. Most filters are capable of inch in size. Particles commonly included in this size

lar maintenance and should be inspected periodically. manufacturer's recommendations and most importantly holds will require cleaning monthly, while others will pumping. When cleaning, the filter should be remove trapped must be washed back into the septic tank.

## The Delaware Public Service Commission (PSC) The Other Wastewater Regulator *submitted by Brian Carbaugh*

(The information below has been obtained from the Delaware Public Service Commission Website  
For additional information please visit them at <http://depssc.delaware.gov>)

### What is the Delaware Public Service Commission

Created in 1949 to regulate investor-owned public utilities, the Delaware Public Service Commission (PSC) works to ensure safe, reliable and reasonably priced cable, electric, natural gas, wastewater, water and telecommunications services for Delaware consumers. For those services that are moving toward competitive markets, the Commission makes rules to level the playing field between competing providers, and resolves disputes between these providers. The PSC also assists consumers in resolving disputes with their service providers.

The PSC is made up of five part-time [Commissioners](#), appointed by the Governor and confirmed by the Senate. The Commissioners are supported and assisted by a staff of full-time state employees. The Commission makes its decisions at formal meetings that are open to the public. Public hearings regarding rate changes, rulemakings, and complaints are conducted throughout the year.

### The PSC Role in Wastewater Management

On July 6, 2004, legislation was enacted by the Delaware General Assembly, found at 74 Delaware Laws, Chapter 317, which granted the PSC jurisdiction to regulate non-governmental wastewater utilities having fifty (50) or more customers in the aggregate. This authority includes the jurisdiction to grant and revoke Certificates of Public Convenience and Necessity (CPCNs<sup>1</sup>). The Commission has adopted rules, regulations and procedures necessary to implement this authority.

The Commission's responsibility is to review all CPCN applications for non-governmental wastewater utilities in Delaware. Each regulated wastewater utility is required to submit a rate filing and tariff<sup>2</sup> containing the rates and terms of service for its customers. Commission Staff reviews the financial viability of the wastewater utility, and the just and reasonableness of the rates and charges, and make recommendations to the Commission as appropriate.

The Commission does not regulate municipalities, governmental agencies and wastewater authorities and districts, or wastewater utilities serving fewer than 50 customers in the aggregate; nor does the Commission regulate individual septic systems.

If you have a complaint or questions regarding wastewater or other utility services, contact the Delaware Public Service Commission at (302) 736-7500.

<sup>1</sup> **CPCN** - If any wastewater utility wishes to expand its service territory, it must apply for a Certificate of Public Convenience and Necessity (CPCN). A CPCN is the authority granted to a wastewater utility by the PSC to serve a specified service territory.

<sup>2</sup> **Tariff** - For regulated services, the rules that a utility must follow in providing service to its customers and the rates it may charge for that service are contained in the utility's tariff. As a consumer, you should make certain that you understand your rights and responsibilities under the tariffs of the utilities that serve you.



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Be sure to visit Nowra's  
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www.septiclocator.com is a  
online search directory  
created by NOWRA to  
help on-site system users  
locate septic products,  
services and industry pro-  
fessional in their local areas.  
This site is a great advertis-  
ing tool to all of DOWRA/  
NOWRA members and it  
is free to you and the pub-  
lic. The site is also a great  
source of information.  
Each member's information  
will be updated annually by  
DOWRA based on your  
membership renewal appli-  
cation.



## Delaware On-Site Wastewater Recycling Association

### 2008 Calendar of Events

<u>February 26-28</u>	Delaware Rural Water Association Conference, Delaware State Fair Grounds, Harrington, DE
<u>March 11</u>	Board/Membership Meeting, 6:30 pm Pizza, 7:00 pm meeting starts Board Room, Exhibit Hall, Delaware State Fairgrounds
<u>April 2</u>	Clay Shoot, 10:00 am Owens Station, Greenwood
<u>April 7-11</u>	17 <sup>th</sup> Annual NOWRA Conference Memphis, Tennessee
<u>May 1</u>	On-Site Professional of the Year Award Del Tech, Georgetown
<u>June 10</u>	Board/Membership Meeting, 6:30 pm Pizza, 7:00 pm meeting starts Board Room, Exhibit Hall, Delaware State Fairgrounds
<u>July 17-26</u>	Delaware State Fair Exhibit Grandstand, Delaware State Fair, Harrington, DE
<u>August 21</u>	DOWRA Membership Appreciation Crab Feast Invite Only, 6:00 pm, Seafood City, Felton ** All those who attend board/membership meetings will be invited
<u>September 8</u>	Board/Membership Meeting, 6:30 pm Pizza, 7:00 pm meeting starts Board Room, Exhibit Hall, Delaware State Fairgrounds
<u>September 12</u>	DOWRA Annual Golf Tournament 12:00 pm, at Jonathans Landing Golf Course, Magnolia
<u>October 14-15</u>	12 <sup>th</sup> Annual DOWRA Conference Dover Downs Hotel and Casino!

New  
Conference  
Location!!

### Getting Caught up on the Nitrogen Cycle

**Nitrogen** -Organic nitrogen is the term used to describe a nitrogen compound that had its origin in living material. The nitrogen in protein and urea is organic nitrogen. Organic nitrogen can enter septic systems as bodily wastes, discarded food material, or as components of cleaning agents.

**Ammonification**-Many of the transformations of nitrogen are mediated by bacteria that use different forms of nitrogen to fuel some of their metabolic processes. During the processes of decomposition, the nitrogen in proteins is transformed eventually to ammonia, (NH<sub>3</sub>) or ammonium (NH<sub>4</sub><sup>+</sup>) by different kinds of bacteria. This process is called ammonification. Nitrogen leaves the septic tank primarily as ammonium in leachate. Some of the ammonium becomes adsorbed to soil particles and is effectively immobilized from further transport.

**Nitrification** - Other kinds of bacteria change ammonia to nitrite. And still other kinds of bacteria can change nitrite to nitrate. These processes are called nitrification. Nitrification is an aerobic process. That means nitrification can occur only in the presence of oxygen. The septic tank ammonium that escapes adsorption is subject to nitrification in aerobic leaching field soils.

**Denitrification** - This occurs when other bacteria transform nitrate to nitrogen gas. Denitrification is an anaerobic process. This means it only takes place when no oxygen or extremely low concentrations of oxygen are available. Denitrification also requires a source of carbon. Some of the nitrate escaping the leaching field soils is denitrified in the unconsolidated soils and groundwater as it flows..

**Summary** -In summary, nitrogen cycles through the air, water and soils, with many transformations mediated by the actions of specialized bacteria. Some of these processes require air while others do not. The best disposal systems take advantage of the metabolic needs of these bacteria to reduce the amount of nitrogen in the effluent.