DOWRA
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WWW.DOWRA.ORG

# DOWRA News

Delaware On-Site Wastewater Recycling Association

INSIDE THIS ISSUE:



## Letter From the President– Lets Get Back to the

Back to the Basics! That is the theme and goal of DOWRA this year. I believe we have lost the purpose of the association. The Board of Directors has reviewed all the comments that were submitted at our last conference and are working diligently to make things right. Sometimes you lose focus on what an association is all about. The Board is looking to make changes to benefit the members. We are busy planning next Fall's Conference/Show and promise it to be even big and better with possible national speakers. We are also in the planning stages for the 2013 show. The Board invites you to get involved. Everyone working for one goal makes a stronger association. We are not an association to just obtain education credits, but, hopefully one that gives you a voice and helps you become a better professional.

As we bid goodbye to 2011, and for most not a memorable year due to the economy, let us strive to work together to make 2012 a more profitable year. I believe one way to accomplish this would be by networking together to become the best onsite professionals we can be.

I look forward to serving as your president for the next two years and sincerely hope we can build our association to be strong and one to be proud of. If you have any suggestions or comments, please feel free to contact me or any of the Board Members.

Hollis T. Warren,

DOWRA President

## DOWRA Committees Seek Volunteers

In order to shape the organization, DOWRA relies on its committees for direction. Currently we have the following active committees: Education; Bylaws; Membership; Del Tech; Conference; Activities; DOWRA/DNREC Partnership; Website; and Newsletter. We are always looking for committee volunteers, so if you would like to participate please contact the corresponding committee chair:

| | |
|---|---|
| **Education** | Eric Valentine, ericv@epandsweb.com or Dan String, dstring@greenstone-eng.com |
| **Bylaws** | Hollis Warren, htwarrent430@aol.com |
| **Conference** | Niki Glanden, firelady49@aol.com |
| **Website/Newsletter** | Hilary and Eric Valentine, hvalent2@dtcc.edu or ericv@epandsweb.com |
| **DOWRA/ Del Tech** | Dan String ,dstring@greenstone-eng.com |
| **Membership** | Ken Walsh, mks1@aol.com |

# 2012 DOOWRA Board of Directors

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NOWRA

DOWRA IS A PROUD MEMBER OF NOWRA
WWW.NOWRA.ORG

**The Board would like to thank Ben Miller for his years of service as a DOWRA Board of Director and DOWRA Member! Your enthusiasm and dedication will be missed. We wish you the best of luck!**

# Doppler or Transit Time Flow Meters—Grey Line Instruments

Doppler and Transit Time are two very popular types of flow meter for non-invasive measurement of flow in full pipes. Like cousins, both these ultrasonic technologies measure flow by using sensors clamped onto the outside of a pipe. But they actually work in almost opposite applications. So success in your installation depends on understanding the differences and making the right choice.

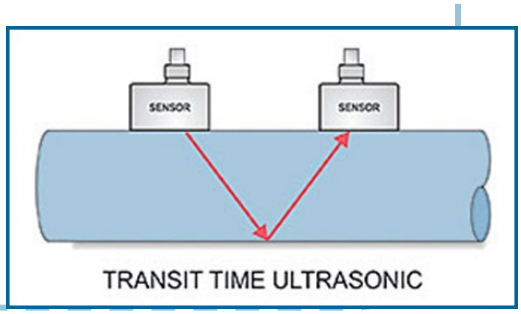
Ultrasound is sound generated above the human hearing range - above 20 kHz. Both Doppler and Transit Time flowmeter technologies are called "ultrasonic" because they operate far above the frequencies or sound range that we can hear.

At the heart of each ultrasonic transducer is a piezo-electric crystal. They are glass disks about the size of a coin. These crystals are polarized and expand or pulse a minute amount when electrical energy is applied to the surface electrodes. As it pulses the transducer emits an ultrasonic beam approximately 5° wide at an angle designed to efficiently pass through a pipe wall. The returning echo (pressure pulse) impacts a second passive crystal and creates electrical energy. This is the received signal in a Doppler or Transit Time transducer.

So far, both these piezo-electric ultrasonic technologies seem much the same. No wonder the choice can be confusing. But now let's look the the differences.

Transit Time transducers typically operate in the 1-2 MHz frequencies. Higher frequency designs are normally used in smaller pipes and lower frequencies for large pipes up to several meters in diameter. So operators must select transducer pairs/frequencies according to the application. Doppler transducers usually operate at 640 kHz to 1 MHz frequencies and work on a wide range of pipe diameters.

Transit Time flowmeters must have a pair of transducers, each containing a piezo-electric crystal. One transducer transmits sound while the other acts as a receiver.



TRANSIT TIME ULTRASONIC

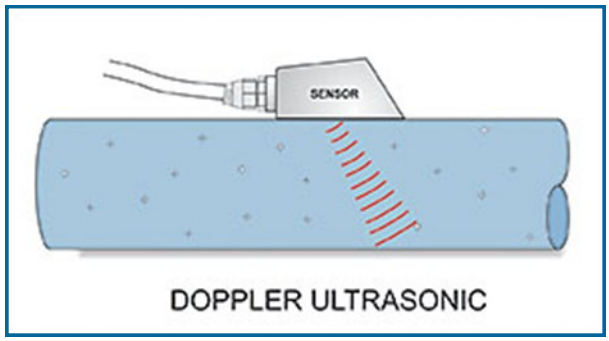
## Doppler or Transit Time Flow Meters—Continued

*Two technologies, one decision: Doppler or transit time flow meters."*

As the name suggests, Transit Time flowmeters measure the time it takes for an ultrasonic signal transmitted from one sensor, to cross a pipe and be received by a second sensor. Upstream and downstream time measurements are compared. With no flow, the transit time would be equal in both directions. With flow, sound will travel faster in the direction of flow and slower against the flow. Because the ultrasonic signal must cross the pipe to a receiving transducer, the fluid must not contain a significant concentration of bubbles or solids. Otherwise the high frequency sound will be attenuated and too weak to traverse the pipe.

Doppler flowmeters manufactured by Greyline Instruments use a single-head sensor design allowing fast, simple mounting on the outside of pipes. The single-head transducer includes both transmit and receive piezo-electric crystals in the same housing.

The Doppler effect was first documented in 1842 by Christian Doppler, an Austrian physicist. We all hear daily examples of the Doppler effect. It is the distinct tone change from a passing train whistle or the exhaust from a race car. We hear this tone change, or Doppler effect, only because we are stationary and the sound transmitter - the train or the race car - is in motion. Doppler flow meters use the principal that sound waves will be returned to a transmitter at an altered frequency if reflectors in the liquid are in motion. This frequency shift is in direct proportion to the velocity of the liquid. It is precisely measured by the instrument to calculate the flow rate. So the liquid must contain gas bubbles or solids for the Doppler measurement to work.



DOPPLER ULTRASONIC

**Two technologies, one decision:**

Doppler flowmeters work best in dirty or aerated liquids like wastewater and slurries. Transit Time flowmeters work with clean liquids like water, oils and chemicals.

Contact Eric Valentine at 703-309-6916, or ericv@epandsweb.com with any questions.

# 2012 DOWRA Calendar of Events!

**February**
February 28 –March 1 , Delaware Rural Water Association Conference
Delaware State Fairgrounds -Harrington, DE

**March**
March 12, Board/Membership Meeting
6:30 pm Pizza, 7:00 pm meeting starts
Board Room, Exhibit Hall, Delaware State Fairgrounds

**April**
April 20, 2012
Owens Station Sporting Clays – 12612 Hunters Cove Road
Greenwood, DE 19950 / Contact: Kevin Sockriter: 302-349-5528

**May**
May 3, On-site professional of the year award
Del Tech, Owens Campus-Georgetown, DE

**June**
June 11, Board/Membership Meeting,
6:30 pm Pizza, 7:00 pm meeting starts
Board Room, Exhibit Hall, Delaware State Fairgrounds

**August**
August 21, 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 10, Board/Membership Meeting
6:30 pm Pizza, 7:00 pm meeting starts
Board Room, Exhibit Hall -Delaware State Fairgrounds

September TBA DOWRA Annual Golf Tournament
12:00 pm, at Jonathans Landing Golf Course (Shotgun Start) - Magnolia

**October**
October 15-16 Annual DOWRA Conference
Location : Dover Downs

## CHECK US ON THE WEB!!!

Find all of our events on our website at www.dowra.org

DOWRA
Delaware On-Site Wastewater Recycling Association

Registration information will be available for all events on the web!

COMPACT MONASHELL

"For the first time in four years, I 've been able to smell"

# Case Study– Compact Monashell—ANUA

**Compact Mónashell Birdies #6 on Indiana Golf Course**

**Situation**

The sixth hole on Eagle Pointe Golf Resort's golf course in Bloomington, Indiana has a wastewater pumping station in the rough to the right of the fairway. For more than 30 years golfers at Eagle Pointe Golf Resort have had to endure the "rotten egg" smell of hydrogen sulfide (H2S) emanating from the pumping station.

**Solution**

Bob Jordan, a frequent golfer at Eagle Pointe Golf Resort and the manager of municipal sales for DBO Technologies had an idea. Bob had seen and heard about the results of Anua's Mónashell biofiltration system for odor and VOC abatement.

When he learned that Anua was coming out with a Compact Mónashell, he asked to try one at Eagle Pointe Golf Resort. The system was installed and running in less than a day.

**Results**

After a few hours, the odor on the sixth hole at Eagle Pointe Golf Resort began to dissipate and ever since then, golfers have been enjoying their rounds of golf and no longer have to endure playing the hole due to the odor.

According to Scott Wolfla, golf course superintendent, "this is the first time in the four years I've been working here I can remember being able to smell wild onions on the sixth hole. When we turned the Compact Mónashell off, within 10 minutes the 'rotten egg' smell was back. Compact Mónashell has been a tremendous addition to Eagle Pointe Golf Resort, and I highly recommend it as an excellent solution for odor problems around lift stations, pumping stations and manholes." Call: 703-309-6916 or visit: www.anua-us.com ©2011 Anua

## Do You Know What This Is?

This is a photo from the inspection world.!

The picture depicts the inlet side of a 2 year old septic tank. It is assumed that the riser was not sealed properly nor was there a tank lid in use. The roots were so thick, according to the inspector it was amazing water was still flowing from the house.

Moral of the story : There is always a need for an inspection before the sale of a property.

Submitted By: Scott Donnelly, High Tech Home Inspections

# NOWRA Announces 2012 Goals!

**Dear NOWRA Members,**

**Welcome to the New Year!** The last 3 years have been rough for our industry, our members, and NOWRA. However, as we begin 2012 we are cautiously optimistic that business conditions will begin to improve for all of us. I am also pleased to report that NOWRA was modestly profitable in 2011 and debt free. This is good news! I thank the hard work of NOWRA's committees, Board of Directors, Executive Committee and Executive Director for this achievement. It means NOWRA can begin to take on new initiatives to offer more to our members. Some of these initiatives are included with eleven new goals that the Board of Directors approved for 2012 in December:

1. Deploy a new NOWRA website during the first Quarter of 2012
2. Form a Task Force to lobby Federal and State governments to increase awareness of the need for and the benefits of decentralized systems and to gain more equity in government grant and loan programs. The Task Force is to be formed by February 15th, 2012.
3. Provide decentralized treatment training at the Pumper Show on February 29th, 2012
4. Hold a successful Annual Conference in April 2012
5. Provide a Distance Learning platform to State Affiliates by April 5th, 2012
6. Form a Task Force to develop a strategy for promoting regulatory reform through the use of NOWRA's Model Code. The task Force is to be formed by March 1st, 2012
7. Update the Septic Locator by June 1st, 2012
8. Develop Roe-D-Hoe rules and have games available for use by State Affiliates by June 30th,2012
9. Develop a content-rich on-line Resource Library for use by members by December 31st, 2012
10. Offer Distance Learning classes by December 31st, 2012
11. Develop designer training for use by State Affiliates by December 31st, 2012

These goals are strategic and important for our industry. The Board believes these goals can be met, but we need help from our members. Please join one of NOWRA's committees to help your association achieve these goals. You can find the list of the committees on NOWRA's website where their mission statements and the committee chairs are listed. Just give the committee chair a call to learn how you can participate in accomplishing our goals for 2012.

See you in Providence in April!,

Richard Otis, Ph.D.,P.E., DEE

NOWRA President

# DNREC Regulation Update!- Jack Hayes

The Groundwater Discharges Section of DNREC has been in the process of updating the draft version of the regulations from the comments received to date from the workshops and meetings for just over 3 years. The proposed draft regulations will be updated on the website on March 15, 2012 in preparation for the highly anticipated public hearing. This has been long awaited by the on-site industry and the DNREC as well. There are many changes being proposed when you open the web-site you will find the draft marked-up version and the draft clean version. The versions are colorful indicating the number of change intervals that have occurred since we started the regulation amendment process in November 2008. The marked version shows all the edits (additions, deletions and changes of mind) that have happened and the clean version shows the final wording once the underlines, overstrikes and additions have been removed.

Look for the final updates on the DNREC website on March 15th and plan to attend the public hearing which begins at 6:00 pm, May 3rd, (tentative right now) in the DNREC Auditorium located on the west side of the Richardson & Robbins Building, Dor. If you would like to add or contribute your written thoughts or ideas please feel free to contact Jack Hayes at John.hayes@state.de.us. Check out www.dowra.org for the link to the reg changes .

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# Nominations for On-Site Professional of the Year –Hilary Valentine

DOWRA and Delaware Tech have partnered together again to honor one of our outstanding industry leaders by awarding them with the On-Site Professional of the Year Award. This award will be presented to someone who has demonstrated outstanding technical excellence and an exemplary work ethic in the field.

Please take a look around you, a decide if someone you know: has made a positive impact on the industry in some way; donates time above and beyond their call of duty; continues to do outstanding work; strives for the best; promotes the industry; and/or takes on innovative or challenging projects. If you answered yes to any of these, then maybe that person should be nominated!

All nominees will be honored with a Performance Recognition Certificate, and the award winner will Receive a Recognition Plaque with a $500 check. Anyone may submit a Letter of Nomination. In submitting a letter, nominators are ask to : Include his or her full name, business title, and contact phone number, and a brief description of the nominee to include accomplishments, work ethic, etc. Nominees during the competition year (2011) 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.

Nomination letters must reach Del Tech by March 15, 2012, for review by the Award Committee. You may mail them to: Delaware Technical & Community College; Attn: Jerry Williams, Environmental Training Center ;P.O. Box 610 ,Georgetown, DE 19947.

If you do not wish to write a nomination, but wish to put forth a potential candidate, please contact Dan String at: dstring@greenstone-eng.com.