



Yankee Onsite Wastewater Association

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National Onsite Wastewater Recycling Association

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Yankee Onsite Wastewater Association Newsletter – Summer 2008

Welcome Note from Steve Corr –President:

On behalf of the interim officers and Board of Directors, we thank you for your support and commitment to the Yankee Onsite Wastewater Association (YOWA) and the onsite decentralized wastewater industry. YOWA is the organization that will help represent your interests as the official northeast affiliate of the National Onsite Wastewater Recycling Association (NOWRA).

Have you visited the:

Official YOWA Website at <http://www.nowra.org/yowa> or the
New NOWRA Website at <http://www.nowra.org>.

2008 YOWA Officers & Board of Director Election results

We are happy to announce that the following YOWA members were elected to serve as the Board of Directors effective January 1, 2008.

Officers (2-year term expires December 31, 2009)

Steven Corr (MA) - President
Russell Martin (ME) – Vice President
Daniel Ottenheimer (MA) – Secretary/Treasurer
John Higgins (MA) – Past President

Board of Directors (3-year terms)

David Clark (MA) – exp. 12/31/09
Stephen Dix (CT) – exp. 12/31/09
Victor Giard (VT) – exp. 12/31/09
Thomas Groves (Regional) – exp. 12/31/09
James Jacobsen (ME) – exp. 12/31/09
George Loomis (RI) – exp. 12/31/10
Andrew McBrearty (MA) – exp. 12/31/09
Michael Moreau (MA) – exp. 12/31/09
David Potts (CT) – exp. 12/31/09
Brent Reagor (MA) – exp. 12/31/09
Lauren Usilton (MA) – exp. 12/31/10
Gary Spaulding (NH) – Appointed for 2008

Thank you to those who participated in the voting process; we appreciate your commitment to expanding the onsite wastewater profession. The Board of Directors will be meeting in accordance with the following schedule:

Board of Directors Meeting January 24, 2008
Board of Directors Meeting, Mystic, CT., March 12, 2008
Board of Directors Meeting, May 27, 2008
Board of Directors Meeting June 24, 2008
Board of Directors Meeting, July 29, 2008
Board of Directors Meeting, September 30, 2008
3rd Annual YOWA Membership Meeting October 28, 2008
Millbury, MA Training Center 6:00 PM - 9:00 PM

YOWA Board Meeting March 12, 2008 Meeting Minutes

In attendance: Steven Corr, President; Russell Martin, Vice President; BOD Members - Dave Potts, Dave Clark, George Loomis, Lauren Usilton, Tom Groves, Brent Reagor, Gary Spaulding, Steven Dix.

Approval of Minutes of January 25, 2008

The Board voted to approve the minutes of the meeting on March 12, 2008 with several changes recommended by Tom Groves.

Treasurer's Report

D. Ottenheimer was unable to attend. S. Corr indicated that the YOWA bank account had approximately \$21,500. The final Budget for 2008 will be presented at the next Board meeting in May.

S. Corr indicated that the difference between the YOWA totals for membership in 2007 and the bill from NOWRA based on 87 members was because NOWRA was including members from New England that joined NOWRA but have not joined YOWA. T. Groves agreed with that conclusion.

Vice President's Report

R. Martin delayed his report to the NOWRA Update and Newsletter Committee report.

President's Report

S. Corr discussed membership needs, the requirements for publishing a Newsletter by June 1, and the need for the Training committee to hold at least two training courses this year, for the Membership committee to develop some innovative ideas for recruiting and for the Outreach committee to develop a program as soon as possible. S. Corr also requested Board members to contact former YOWA members in an effort to have them rejoin.

D. Potts, G. Spaulding and L. Usilton recommended that the Newsletter was needed for outreach to the membership; it should include information on projects, training, regulations and even papers from the Short Course.

NOWRA Update

R. Martin discussed the Association software information (appended) that was presented at the state affiliate meeting that was held in Memphis. A question arose as to the cost of the software to the affiliates. T. Groves subsequently clarified that information indicating that NOWRA will charge the affiliates a one-time charge of approximately \$500.

T. Groves indicated that the Memphis meeting was a success from the technical side but the attendance did not meet expectations. T. Groves indicated that NOWRA will probably meet in Milwaukee in 2009. No decision has been made for 2011. YOWA has proposed a meeting in the spring in Providence in conjunction with the Short Course.

Committees Reports

Education: The Education committee is still planning to conduct a session in VT. and probably Mass. this year on pressure distribution and dispersal systems. G. Loomis discussed a potential two-day event in VT. this summer.

Outreach: S. Dix discussed preparing a three page strategic planning and mission statement document. S. Dix will send a draft to S. Corr for comment.

Newsletter: R. Martin indicated that he would make an effort to prepare and send out a Newsletter by June 1. Several ideas were discussed for content including meeting minutes, membership, and Short Course articles. There was also a discussion of including advertising in the Newsletter in the future. G. Spaulding indicated that the NH installers had developed advertising rates for their Newsletter. T. Groves will send information on NOWRA advertising.

Membership: Gary Spaulding intends to develop a trifold document for membership recruitment. He requested that information from other states on potential membership lists from other organizations or from installers, soil evaluators, etc.

Other Old Business

Discussion on White Paper Development for Decentralized Treatment- S. Corr opened the discussion by indicating that T. Groves forwarded to the Board a whitepaper on decentralized policy under preparation by NOWRA. It had been agreed at the last meeting that all comments would be sent to S. Dix. S. Dix would review the policy and comments with D. Potts and A. McBrearty to develop a policy statement for YOWA.

New Business

VT. Small Community Sewage Solutions Conference on June 4th: After some discussion, the Board recommended that YOWA attend the VT. Small Community Sewage Solutions Conference on June 4th. The booth will cost \$125. S. Dix volunteered to attend and prepare information for the booth.

Next Meeting

The next meeting will be a telephone conference call on Wednesday May 28th at 2:00 PM. The meeting will last approximately 1.5 hours.

Meeting adjourned, 11:30 a.m.

2008 YOWA Membership renewals

In 2006, YOWA established itself as a viable and energetic state member association. Our membership at the conclusion of 2007 was 85 members. YOWA created cost-effective communication with our members in 2007 by the use of an electronic newsletter and presence on the Web (www.nowra.org/yowa). We look forward to continuing these efforts in the coming year.

2008 will bring new challenges to YOWA. We have become full time, dues paying members of NOWRA (\$40 per member). We will continue to receive the benefits of belonging to this

national organization representing all sectors of the onsite/decentralized wastewater industry – currently 4,000 plus members nationally.

In order for us to continue this effort and grow as a state member association of NOWRA, we need your continued support. If you have not renewed for 2008 you can download a membership application at www.nowra.org/yowa. Dues for 2008 will be \$110 per member and \$40 for students. We need your support to help continue this exciting path that YOWA is blazing.

If you have any questions about YOWA, please feel free to contact us at the address and phone number listed in this newsletter. Thank you once again for becoming part of YOWA and we look forward to an even more exciting 2008!

Current Committees:

YOWA Outreach Committee - January 2008

Stephen Dix (Chair)

Jim Bransfield

Jim Healy

Leland Jones

Michael B. Moreau Jr.

John J. Murphy NEIWPC MA

YOWA Education Committee - January 2008

Roland Dupuis

Vic Giard

Jim Jacobsen Maine

George W. Loomis(Co-Chair)

Holly A. Meehan

Michael B. Moreau Jr.

John J. Murphy NEIWPC MA

Brent Reagor (Co-Chair

Charles J. Resevick

Gary Spaulding

YOWA Newsletter – January 2008

Russell Martin

YOWA Membership – January 2008

Gary Spaulding

3rd Northeast Short Course – March 11-13, 2008 – Groton, CT

One of the highlights of the 3rd Northeast Subsurface Wastewater Short Course was the presentation by Dr. George Tchobanoglous. This program, sponsored in part by **YOWA**, drew over 250 participants from the subsurface wastewater industry and featured presentations from well known individuals from around the country. The abstract of Dr. Tchobanoglous's presentation is included for your reference.

For over 35 years, George Tchobanoglous taught courses in environmental engineering at the University of California, Davis, where he is Professor Emeritus in the Department of Civil and Environmental Engineering. His research interests are in the areas of wastewater treatment and reuse, wastewater filtration, UV disinfection, aquatic systems, wastewater management for small and decentralized systems. He received a B.S. in Civil Engineering from the University of the

Pacific, an M.S. in Sanitary Engineering from the University of California, Berkeley, and a Ph.D. in Environmental Engineering from Stanford University. He has authored or coauthored over 375 publications, including 14 textbooks and four engineering reference books. He is a registered engineer in California and is a member of the National Academy of Engineers.

Source Control for Enhanced Decentralized Wastewater Management

George Tchobanoglous and Harold Leverenz

The recovery of nutrients (nitrogen, phosphorus, and potassium), the removal of trace organics, and greater water reuse are important issues that will have to be dealt with in the implementation of future of decentralized wastewater management systems. Over the years, a number of alternative treatment processes have been developed to remove nitrogen. Typically, these processes involve sequential nitrification followed by denitrification; in some processes simultaneous nitrification/denitrification has been observed. However, because of the high ammonium content of most wastewaters (typically, 60 to 80 mg/L), complete nitrification is difficult because of alkalinity limitations (a minimum of 7.1 mg/L of alkalinity expressed as calcium carbonate is needed for effective nitrification). Further, where nitrification can be achieved, there is insufficient organic carbon to denitrify the nitrate (a minimum of 4.1 mg/L of BOD is needed per mg/L of nitrate nitrogen). Given the variability and imbalances that occur in wastewater, nitrogen removal will continue to be a problem in many parts of the country. The recovery of phosphorus will become important because the deposits of natural phosphorus are being depleted. It is estimated that at the existing rate of mining and usage, the known deposits of phosphorus will be exhausted by 2050. Once depleted, there is no easy way to recover phosphorus, currently being dispersed in the environment. Further, nitrogen can be recovered from the atmosphere, but the process is energy intensive. It is for this reason that increased attention, including specialty conferences, is being given to the recovery of nitrogen and phosphorus from wastewater. Because trace organics can be found everywhere in the environment, increased attention is being given to the removal of these constituents in centralized wastewater treatment plants. The removal of trace constituents will also be an issue for decentralized systems.

To deal with the issues cited above will require a paradigm shift in the conventional approach to wastewater management onsite systems. Source control involving urine separation, as proposed and discussed in this paper, is the critical step needed to deal with these issues. It is important to note that urine contains about 75 to 85 percent of the nitrogen and up to 60 percent of the phosphorus and potassium contained in domestic wastewater. If urine were separated, the residual nitrogen wastewater would not be a treatment issue, and in fact there would be sufficient alkalinity and organic carbon in all parts of the country to reduce nitrogen to even lower levels, if required. With nitrogen no longer an issue, cost effective treatment systems could be implemented for the removal of BOD, TSS and a portion of the trace organics. If a passive membrane were used for effluent filtration, effluent reuse by means of drip irrigation could be implemented effectively. Lightly loaded, it has been demonstrated that essentially all of the trace organics can be removed in the soil. These subjects are examined in greater detail in this paper, including alternative schemes, mass balances, and cost projections.

Who is NOWRA and what do they do?

NOWRA is the largest national organization representing all sectors of the onsite/decentralized wastewater industry (i.e., pumpers, contractors, installers, regulators, designers, engineers, manufacturers, and educators). Providing education and training programs to professionals within this industry, to policy officials, the public, and system owners is the driving force of this organization. Through education, NOWRA provides a leadership role in state and federal legislative initiatives to protect water quality and public health.

Have you visited SepticLocator.com?

The Septic Locator is an online directory and search engine designed to allow you to easily find a local product supplier, service provider or individual industry practitioner in your area. The Septic Locator is created and maintained by NOWRA, by joining YOWA you are listed in the locator. No other site on the web offers this kind of direct access to onsite wastewater professionals and products.

**18th Annual NOWRA Conference April 6-9, 2009, Milwaukee, WI
Midwest Airlines Convention Center - Milwaukee, Wisconsin**

NOWRA's Annual Technical Education Conference and Exposition provide a unique forum for professional education and learning! The education sessions present the latest technologies and research of the industry, focusing on core topics.

- Soils and watershed management strategies and applications
- Assessment tools or approaches to broader integrated evaluations
- Innovative systems, technologies, and solutions
- Education strategies and applications
- System planning, performance and evaluations
- Watershed management strategies and applications
- Regulations and the regulatory framework
- And of course, NOWRA's premier program, "The Basics of Onsite Systems –A to Z"

To view more information on registration fees, agenda and more, please go to <http://www.nowra.org>.

**The 2008 NOWRA Installer Academy - December 8-10, 2008
Riviera Hotel, Las Vegas, Nevada**

The NOWRA Installer Academy is the only program in North American that features the nation's leading educators and practitioners teaching skills and providing the technical knowledge needed to comply with state regulations.

The Academy offers a new practitioner education and training program in combination with business sessions – manufacturer product training workshops and the NEHA Installer Credential Examination. This program gives all attendees 3 days of sessions with "State Approved" CEU's.

Online attendee and the Exhibitor registration will be available early May. States are requested to assist in getting this information out to industry practitioners. For room reservations at “The Riviera Hotel” call 1-800-634-6753 and request the group rate for NOWRA's 2008 Installer Academy and Tradeshow.

Topic Areas

- The New Consortium Installer and Advanced Training Courses
 - General Construction Material Management and Piping
 - Soils and Site Evaluation
 - Watertight Septics - Holding and Dose Tanks
 - Design and Installation Problems - Encounters and Solved
 - ATUs, Below and Above Grade Systems
 - Creative Design Solutions for Tough Sites
- Manufacturer Training Sessions
- Business Management Sessions
 - Sales for the Small Business
 - Selecting a Legal Structure
 - Financial Management
 - Business Management Practices
 - Starting an O&M Business

This is a program designed knowing that installers and service providers are a valuable industry asset. It is a unique education and training program provided to advance needed skills, expertise and professionalism, while also presenting new educational materials. Always held in December in Las Vegas, NV, the NOWRA Installer Academy includes exhibits and manufacturer training sessions. It is one you cannot afford to miss. Additional information will be included in the upcoming Onsite Journal and posted to the NOWRA website soon.

Request for Training Presentations

Share your expertise and experience with others in our industry at The Installer Academy, a NOWRA premier education and training program.

Attendance and interest in this event continues to grow, and this year will prove even better! This conference focuses on specialized installer training programs. We are asking onsite professionals to share valuable knowledge and experience in design, installation, inspection and O & M of systems, as well as some of the practical skills you need to do your job and run a successful business. This is your chance to participate as one of the trainers in a growing event! Deadline for proposals is June 26, 2008.

For full details, please visit <http://www.nowra.org/abstracts.html>

Below is a listing of some current news and events from the New England States:

Connecticut

Updated Zenon Performance Appraisal

Connecticut DEP has updated its Zenon Performance Appraisal in March of this year. The previous Appraisal prepared by the Department was in November 2006. This update incorporates discharge monitoring reports (DMRs) from November 2006 - January 2008, amends previous graphs and contains specific updates on the 12 Zenon facilities operating in Connecticut.

To download this Performance Appraisal or Guidance Document for Design of Large-Scale On-Site Wastewater Renovation Systems visit:

http://www.ct.gov/dep/cwp/view.asp?a=2721&q=325706&depNav_GID=1654

The Department's new website address is www.ct.gov/dep.

Maine

A Task Force outside the Department, consisting of licensed site evaluators, local plumbing inspectors, system installers, and equipment manufacturers will present recommended rule changes to the Department by July 1, 2008. We will proceed with the formal rulemaking process including changes sought by the Department with the goal of completing the rulemaking process by December 31, 2008. A copy of the proposed changes will be available on our website as soon as possible. <http://www.maine.gov/dhhs/eng/plumb/index.htm>.

Beginning July 16, 2008 system inspections for real estate transfers in the coastal Shoreland zone will become mandatory. Since 2003 the Department has conducted a Voluntary Certification Program for individuals wishing to inspect operating systems; this program will continue with the possibility of rulemaking for the mandatory inspections.

To view a list of approved I/A technologies in Maine visit:

<http://www.maine.gov/dhhs/eng/plumb/news.htm>

<http://www.maine.gov/dhhs/eng/plumb/lists.htm>

Massachusetts

Revised Groundwater Regulations

The proposed revisions to the Ground Water Discharge Permitting Program Regulations (the "Ground Water Regulations"), 314 CMR 5.00, make a number of changes to streamline the existing permitting process and reduce the time it takes for an applicant to obtain a ground water discharge permit. The proposed regulations authorize the use of general permits, provide for administrative renewal of certain individual ground water discharge permits, and address two bottlenecks in the existing permitting process- the hydrogeological report and the financial assurance mechanism. To facilitate these streamlining changes, MassDEP is also revising 314 CMR 2.00, the provision of the regulations that establishes the procedures that applicants and the Department must follow when issuing permits. In addition to these streamlining changes, the proposed revisions to the Ground Water Regulations expand the list of activities that do not require a permit.

The proposed regulations also make a number of changes to streamline the Department's existing regulations and policies. The proposed changes incorporate several existing policies into the regulations, the Nutrient Loading Approach Policy, the Private Sewage Treatment Facility Policy, and the Policy Establishing the Regulatory Requirements for Closed Loop Geothermal Heat Pump Wells. The proposed regulations also provide that the Department may issue an individual ground water discharge permit that authorizes the reuse of effluent from permitted sewage treatment facilities in accordance with the proposed Wastewater Reuse Regulations, 314 CMR 20.00. This change eliminates the need for the Department's Wastewater Reuse Policy and allows the Department to issue one permit that authorizes a ground water discharge of effluent resulting from the treatment of sewage at a facility and the reuse of this effluent as reclaimed water.

To view/download the complete document, please visit:

<http://www.mass.gov/dep/service/regulations/newregs.htm>

To view a list of approved I/A technologies in Massachusetts visit:

<http://www.mass.gov/dep/water/wastewater/t5itprog.htm>

New Hampshire

Adopted Subsurface Rules

New Hampshire DES has adopted new subsurface rules. The New Hampshire Code of Administrative Rules, Chapter Env-Wq 1000 Subdivision and Individual Sewage Disposal System Design Rules can be downloaded at <http://des.nh.gov/rules/env-wq1000.pdf>.

To view a list of approved I/A technologies in New Hampshire visit:

<http://www.des.state.nh.us/factsheets/ssb/ssb-12.htm>

Rhode Island

New Septic System Rules

The Department of Environmental Management's new Rules for septic systems took effect on January 1, 2008. Under the new Rules, the term "individual sewage disposal system" (ISDS) has been replaced with the term "onsite wastewater treatment system" (OWTS) to better emphasize the importance of treatment in system function and environmental protection.

The new Rules update technical standards for the siting and design of septic systems, improve treatment for environmental protection and public health, increase protection of water resources, streamline the permitting process, and reformat the rules to follow the sequence of actions taken in permitting a septic system in Rhode Island. Among the technical changes are revisions to design standards to ensure optimal treatment in soil dispersal trenches, higher performance standards for septic systems in salt pond watersheds and on small lots with drinking water wells, and increased setbacks between large systems and drinking water wells.

The revisions to the septic system Rules were developed in conjunction with a diverse group of stakeholders. The stakeholder group included representatives from the building community, licensed septic system professionals, environmental organizations, municipal government, the University of Rhode Island, and state and federal agencies. In addition, the Department held five public workshops throughout the state, before holding a public hearing on the amendments in September.

Additional information on implementation of the new Rules, including revised forms, will be posted on this website as it is developed.

To download a revised form or subscribe to the OWTSINFO E-mail List visit:

<http://www.dem.ri.gov/programs/benviron/water/permits/isds/newowts.htm>

To view a list of approved I/A technologies in Rhode Island visit:

<http://www.dem.ri.gov/programs/benviron/water/permits/isds/pdfs/ialist.pdf>

Vermont

Designer Licensing Program

Visit <http://www.anr.state.vt.us/dec/ww/sitetech.htm> for the latest information on the Vermont Designer Licensing Program

To view a list of approved I/A technologies in Vermont visit:

<http://www.anr.state.vt.us/dec/ww/Innovative.htm#approvals>

Massachusetts Title 5:

<http://www.mass.gov/dep/water/wastewater/septicsy.htm>

National Environmental Services Center (NESC):

- <http://www.nesc.wvu.edu/>

New England Interstate Water Pollution Control Commission (NEIWPC):

- <http://www.neiwpc.org/>

New England Water Environment Association:

- <http://www.newea.org>

New Hampshire Department of Environmental Services:

- <http://www.des.state.nh.us>

Rhode Island Department of Environmental Management:

- <http://www.dem.state.ri.us>

University of Rhode Island (URI) Onsite Wastewater Training Center:

- <http://www.uri.edu/ce/wq/owtc/html/owtc.html>

Vermont Department of Environmental Conservation:

- <http://www.anr.state.vt.us/dec>