

ONSITE *journal*

Summer 2007

NEWS FOR THE DECENTRALIZED WASTEWATER INDUSTRY

Vol. 16, No. 3

Inside this edition:

- 2008 NOWRA Board Election Ballot
- Update on Water Softener Study & Issues
- 2007 Member Needs Survey Report



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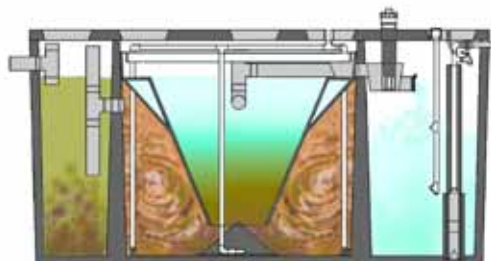
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ONSITE Summer 2007 journal

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www.modelcode.org
www.waterforalllife.org



NOWRA Board, Committee Chairs, and State Representatives Discuss Member Needs and Representation at July Meeting

Convening at the location of NOWRA's 2008 Conference in Memphis, Tennessee, nearly 30 association leaders spent two days (July 17–18, 2007) discussing the steps needed to move the organization forward while representing the interests of the membership. (Separate and more detailed reports of these meetings are provided on the NOWRA website). The overall objective of this combined effort is to begin to identify 2008 program priorities that respond to member needs and are in alignment with NOWRA's mission and strategy pillars. An important part of this process is the findings report on member needs, which was presented by the NOWRA Executive Director to each of the groups separately. (Highlights also provided on pages 6-7).

NOWRA Financial Report

NOWRA Board member, Howard Wingert reported on the status of meetings with Marriott Hotel officials to resolve the \$40,000 attrition issue. He said that an official letter from Marriott is being sent confirming the agreement that NOWRA will only be required to pay \$20,000; and that the association has already begun making its payments. Wingert stated that Marriott officials have been most understanding and responsive in assisting NOWRA with this matter, and that the association has agreed to provide leads to the hotel for additional meetings in the future.

The attrition issue NOWRA must address is the result of a low registration at the 2007 Annual Conference, which resulted in fewer attendees booking sleeping rooms at the Marriott Hotel in Baltimore. It is standard practice that all hotel contracts have stipulations that when projected revenues are not achieved by the hotel on sleeping rooms, a percentage of the booked rooms must be paid for by the contracting organization. NOWRA's projections for the 2007 conference were based on a slight increase over the success of its 2005 conference and the anticipation that with the addition of an international component, additional rooms would be taken.

Not only is NOWRA dealing with the financial repercussions of the attrition fee, the organization is also addressing the issue of lost revenues needed for its 2007 operations. A major part of NOWRA's income to finance its operations and sponsored programs comes from the annual conference profits. As a result of this combined financial situation, staffing levels and management fees have been cut in the association office, and no program costs other than basic operations are authorized for funding.

2008 Board of Director Candidate Announcement

Vice President Tom Groves, reported to the Board on the list of 2008 Board of Director Candidate Nominations and the election process. (See announcement on page 9). One of the major issues the Nominations Committee has to address is the challenge of finding candidates from the states for the various representative sectors. How do we get people to apply for candidacy? The Board decided that all official ballots will be mailed and faxed to a different location in the event that the NOWRA headquarters office changes after October 1, 2007.

NOWRA (Final Draft) White Paper on Decentralized Systems

Board members reviewed the final draft of a "White Paper" prepared and recommended by the NOWRA Technical Practices Committee on the role of decentralized systems in the wastewater infrastructure. This White Paper is the first of a series of position statements to be officially adopted by NOWRA that presents the principles and values the industry represents. These white papers will be used by NOWRA and state leaders in meetings with state and political officials. Revisions to this document are being made and will be brought back to the Board for final action at its August 21 meeting.

2008 Membership Dues

NOWRA Board members discussed the previously approved second phase of the 2005 plan between the Board and the State Leaders Committee that would increase state member fees from \$30 to \$40 in 2008. (Phase 1 was the increase of fees from \$20 to \$30 in 2006.) Questions were raised as to whether membership might decrease, how the economy fit into the scenario and what other factors may be affected by this decision. It was also questioned whether the rate for the independent dues would increase as well. The Board members passed a motion that affirmed the 2005 plan regarding the second phase of the planned incremental member dues increase in 2008 from \$30 to \$40. A decision by the Board on the feasibility of implementing the increase for 2008 will be discussed at a future date.

Installer Academy and Education Programs

Sara Christopherson, Education Committee Chair reported that the education program for the Installer Academy is in place and will feature the curriculum being developed by the Consortium members. NOWRA's Board also expressed its desire, which was formalized in an agreement through an

official motion, to sponsor the four pilot training events. NOWRA will pay the agreed fee and work with the state associations to identify locations and a schedule.

NOWRA Board and State Representatives Discuss Actions to Strengthen Relationships

Following the August 2006 conference and State Leaders meeting, both the NOWRA Board and representatives of the State Leaders Committee formed task forces to address communication and other issues. The State Leaders Committee Task Force is chaired by Steve Branz (North Carolina) and NOWRA's Board Task Force is chaired by Tom Groves (NOWRA Vice President). Each of the groups were tasked to define specific items to be addressed by the other group. These items then formed the basis for the discussion at the July combined group meeting.

The State Leaders Committee Task Force has requested, on behalf of all the states, that NOWRA's Board change its bylaws to provide a seat and representation for the States on the Board; to participate in the annual nominations process; and that the States' executive directors be a recognized participant in committee representation. It is also desired that the State Leaders Committee members be invited to participate in the annual strategic planning session. NOWRA's board has requested of the State Leaders Committee that they define the process in which committee representation occurs, the procedures to be followed for conducting their meetings and how voting on decisions will occur.

The discussion among the two groups in July focused on clarifying respective positions and defining activities in which the relationship will be strengthened from the identified requests. During the meeting, the state's representatives also recommended to the NOWRA Board that an outside association management consultant or firm with a construction background be hired to do an evaluation and assessment of all NOWRA program services and their management and determine how they relate to the constituent groups. The state representatives believe this assessment represents an opportunity to resolve a number of questions and concerns previously discussed about NOWRA's programs, that were also addressed by the group at their meeting in Baltimore (March 2007). It

was explained that this assessment takes into consideration the association's experience and where the organization's process differs from strategic planning.

Concluding the joint meeting and discussion, NOWRA's Board of Directors took actions on the following matters.

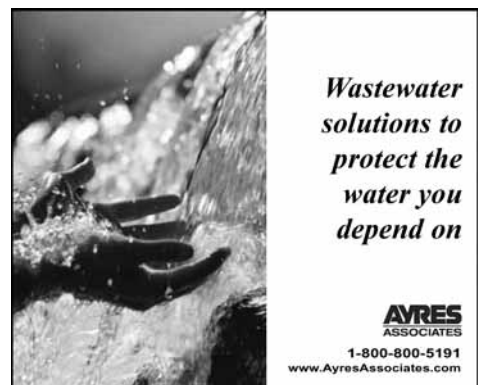
- A motion made and seconded recommended that the Finance Committee include a line item in the 2008 budget for travel funds for assistance to board members and to retain a lobbyist to address legislative issues. The motion passed with a majority of board member support and one abstention.
- A motion made and seconded to create a resolution inviting affiliate state groups to, and encouraging their participation in, the NOWRA Board strategic planning and quarterly (face-to-face) meetings in order to provide a voice on behalf of their constituency. The vote on the motion passed unanimously. It was further agreed that the action on the motion will be affirmed with a statement/resolution that is included in NOWRA's new policy and procedures manual.
- Discussion concerning State Leaders role/participation on the NOWRA Nominations Committee and Board of Directors.

A motion was presented that a task force, comprised equally of NOWRA board and affiliate state group members, investigate and recommend specific bylaws changes needed for a position on the nominating committee and to have this document ready for action at the December Board meeting. The motion was seconded and passed by unanimous vote.

The Bylaws Committee was then tasked by the NOWRA President and Vice President to review and define an appropriate approach to take the State Leaders Committee to a "new" level—one that is different from the current status as a "working committee category." Both the wording and working procedures of the committee should be addressed, and a template created and completed by December 1.

NOWRA's Board will follow-up on these items with reports on their status at the August 21 teleconference meeting. ■

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Highlights of 2007 NOWRA Member Survey Results

Concluding a six month effort in early June, the draft findings from over 400 compiled responses of the NOWRA 2007 Member Survey were presented to the NOWRA Board and State Association representatives at the July meetings in Memphis. The survey questionnaire prepared for the study was extensively distributed through membership packet mailings, annual state meetings and in email communications, beginning December 2006.

The Draft Member Needs Report provides three levels of information that were compared against each other: responses from individual members, responses from state boards, and responses from NOWRA Board members. This information is being benchmarked against the recent ASAE (American Society of Association Executives) report “7 Measures of Remarkable Associations (March 2007).” This 4-year study examined and reported on those associations that provide stronger levels of benefits and services to their members—and what it takes to accomplish these actions.

Each of the participating states received a separate report on their member responses. The findings in the NOWRA 2007 Member Needs Report will be used by the NOWRA Board and States to set 2008 goals, plan educational programs and determine future directions NOWRA should pursue on behalf of its members within the onsite industry. Highlights of the response findings from NOWRA members are provided. More details will be included in the next issue of the *Onsite Journal*. The draft findings report is located on the NOWRA website at www.nowra.org.

Survey Results

Who responded:

Overall, there was a strong representation from all geographic sectors of the states. The highest percentages of states responding were: Michigan (59%), Colorado (48%), Indiana (32%), Yankee (21%) and Maryland (19%). The member sector responses are from the various professional categories (with some overlap due to combined professions).

- 49% – Installers/Contractors/Service Providers
- 24% – Engineers/Soil Scientists/Designer
- 24% – Regulators
- 8% – Vendors/Suppliers/Manufacturers

A profile of the responding “average” industry member shows an individual who has:

- worked at least 18.6 years in the onsite industry
- some education and certification (70%)
- been a state association member for an average of 3.6 years and would recommend to a colleague joining their state association

Most, however, did not join their state association in order to become a NOWRA member.

Why individuals join an industry associations:

- 35% joined for education and training
- 30% joined for networking opportunities
- 14% joined so that their professional interests would be represented on regulatory and legislative issues
- 7% joined for possible job opportunities.

Most valued association service(s):

- Education and training is the most highly valued service for members
- Networking, as well as representation and protection, closely follow
- The Septic Locator and job opportunities

Programs and services members want from state associations:

- Education and training
- Certification and licensing
- National and/or state standards
- A legislative agenda pursued

Programs members believe NOWRA should provide:

- Support for state education and training seminars (highest)
- Industry standards
- Services to improve onsite standards
- Professional development was followed by an educational clearinghouse, online education and technical design manuals, and national certification

Identified professional industry needs:

- Higher levels of practitioner expertise (ranked higher)
- Standards established for installation, maintenance and service
- Education and training
- Regulator support of codes
- Having more knowledge of state rules and codes

continued on next page

Survey Results *(continued)*

Actions/initiatives members want the onsite industry to address:

- Certification for installers, service providers, system designers and engineers is ranked #1
- Industry standards developed for Installers and O&M
- Advocating state CEU requirements, homeowner education, lobbying, establishing a national inspection point of sale program, and developing RME standards

Three most important benefits members now receive from state associations:

- Education/training
- Networking
- Communication about regulations and legislation

Three most important benefits members now receive from NOWRA:

- Education/training/certification
- Representation of professional interests on a national level with legislators and regulators
- Standards for practice and certification

Three most important benefits members want to receive from a state association

- Education/training/certification
- Advanced training opportunities and manuals
- Legislative representation

Three most important benefits members want to receive from NOWRA

- Education/training/certification programs
- Legislative and regulatory updates and representation/lobbyist
- Support to state association programs

Ranking of existing state and NOWRA services

- State conferences and education programs ranks highest
- NOWRA'S *Onsite Journal* and Conference are second
- State Newsletters
- NOWRA's insurance program and Office Depot program ■



NOWRA & EPA Model Code Regulator Workshops

NOWRA is pleased to announce that two Model Code Regulator Workshops will be held in the Fall. The first one, on September 14th, will be hosted by the Colorado Professionals in Onsite Wastewater. The second workshop will be held in conjunction with the Washington State Public and Environmental Health Association's 14th Annual Joint Conference on October 10. (See accompanying box for details.) With funding from the U.S. EPA Office of Water, these workshops are part of an overall education and outreach program for regulators and policy officials who manage onsite and decentralized systems within a regulatory framework. The workshops assist regulators and policy officials in understanding how to use the Model Code documents to evaluate, revise, or develop codes governing onsite systems, as well as identifying options available and steps involved to accomplish this process. The program includes an overview of the newly adopted documents on CD entitled the *Model Code Framework for the Decentralized Wastewater Infrastructure*, which was released in March 2007.

The *Model Code Framework* was written and developed by a number of onsite regulators who are part of NOWRA's Model Code Committee, some of whom will be conducting the workshops. All workshop participants receive a CD containing the *Model Code Framework* documents and a workbook containing the Executive Summary and presentation. The Model Code

MODEL CODE REGULATOR WORKSHOPS

September 14, 2007 • 8:00 am to 4:00 pm

Hosted by the Colorado Professionals in Onsite Wastewater at the Commerce County Conference Room, Englewood, Colorado

October 10, 2007 – 8:30 am to 4:00 pm

In conjunction with the Washington State Public and Environmental Health Association's 14th Annual Joint Conference, Yakima Convention Center, Yakima, Washington

Lodging is available at the Red Lion & Howard Johnson Hotels.

Workshop Leaders: Dr. Richard Otis, P.E., Anthony Smithson, R.S., Michael Corry and Mark Hooks, R.S.

6 CEUs and certificates of completion are awarded.

Workshop registration: www.modelcode.com

Regulator Workshops are at no cost and are open to all state and local government officials involved in onsite wastewater and decentralized systems. An educational and informational website (www.modelcode.org) contains all model code documents produced, as well as updates about ongoing activities. Recent workshops were held in Lexington, Kentucky, Baltimore, Maryland, and Atlantic City, New Jersey. ■



Facts About the NOWRA SepticLocator and Its Cost Savings

The NOWRA SepticLocator is both an online member directory, and a unique website “yellow-pages” listing for the industry. It is being actively used throughout the U.S. and Canada, and is linked to critical partnering organizations such as the National Home Builders Association Toolbase, the National Ground Water Association, the Water Quality Association—and will be featured in September on the LOWE’s Tips for Pro’s webpage. In addition, both NOWRA and the SepticLocator are being promoted in an article this fall in *This Old House* magazine.

The SepticLocator has been a prudent investment for both NOWRA members and the organization. Instead of NOWRA spending approximately \$20,000 annually to produce and distribute a printed directory, this new approach has saved NOWRA nearly \$40,000 in the past three years.

Here’s How the SepticLocator Works to Save both NOWRA and State Groups Time & Money!

- Selected data from the NOWRA member database (where information about members is maintained) is used to provide member details in the online directory. Instead of maintaining two separate systems (with the state and NOWRA), a cost-effective core database now exists—thus saving time and money.
- Changes to member records can be made by both the state associations and members themselves. This action means that member information is always current and up-to-date. State associations no longer send in annual lists to the NOWRA office. If a member wants to change their contact information, or details about their products and services, they can do so instantaneously.
- The member record data file is also structured to include records and documentation of member education and training CEUs—thus assisting members in providing accurate files and permanent records of their professional development.

How the Money (and How Much) Was Invested in this Program

- 2005—NOWRA’s Board made the decision to create an online membership directory, rather than spend \$20,000 to produce the annual member print directory (not including mailing costs to 3943 members - \$7,491.70). This decision was based on both the level of staff time required to update member records, and the overall costs to produce the directory. It was also questioned if the hard copy approach was the most effective means for member information. By the time the directory was produced, a portion of it would be out of date.
- 2006—NOWRA upgraded its website technical capabilities for administrative management of the SepticLocator and provided an online conference registration system. This cost was \$7,500. Additional costs in 2006 were those

associated with hosting fees. NOWRA did not print the traditional directory, and thus realized an additional cost savings.

- 2006—NOWRA received two small grants to establish both the Model Code and Water for All Life websites (for the 2007 international conference), and at the same time was able to improve its existing website. These improvements were accomplished by the combined efforts of a technical contractor, NOWRA staff, and a Board member. The cost savings realized to NOWRA with the Board member and staff doing the additional content and structural work on the three websites was nearly \$25,000.
- In 2007, if NOWRA were to produce and mail a copy of a print directory (\$20,000 production cost + \$2.40 postage per document) to each of its 5093 members, the total cost would be: \$32,223.20.

NOWRA now has an integrated member website communications system that includes the membership database, the online directory/SepticLocator, an E-communications newsletter, and online conference and meeting registration capabilities. In 2007, with the effectiveness of the online directory, the decision made in 2005 to discontinue the print directory has been reaffirmed. The association has easily saved \$30,000!

In addition, NOWRA’s 2007 Business Benefit Program has increased to 16 GOLD members—a 25% increase since 2006.

Who’s Visiting and Using the SepticLocator Website

The NOWRA office began aggressively marketing the SepticLocator (April 2007) following the 2007 conference. As a result of this marketing effort, usage of the site has dramatically increased.

The following statistics are provided for the month of July 2007:

- Total number of visits during the month of July to septiclocator.com – 1,603.
- Average visits per hour in July – 51; a maximum/peak occurrence of 87.
- Average number of visits per day – 141; maximum number in one day was 484.
- 54% of the visits originated directly to septiclocator.com.
- Other sites referring/directing users to the septic locator are: Google, wellowner.org (NGWA), toolbase.org (NAHB) & realestatejournal.com.

Members from Delaware, Washington, and Virginia have reported to the NOWRA office receiving calls for business from the septiclocator.com. In July, the NOWRA office received 6 requests from new companies asking that they be placed on the SepticLocator and join NOWRA. ■



2008–2010 NOWRA Board of Directors' Candidate Biographies

ROBERT B. MAYER, P.E.

Engineering/Designer Category

Profession, position & title: Robert “Bob” Mayer is an Engineer/Manufacturer in Elkwood, Virginia, and President/ CEO of American Manufacturing, Inc.

Years within the onsite industry: 35 years of experience as an engineer in the onsite industry, Masters degree in engineering, a Professional Engineers license and past NOWRA President and Technical Practices Committee chair.

Commitment to Board position: My previous involvement in NOWRA’s work demonstrates my commitment to working with both the Board and the state’s association. I have also served as a board member and president for the Virginia Onsite Wastewater Recycling Association.

Industry contribution: I am interested in continuing to promote better technical standards for onsite engineering applications and promote the enhanced status of Onsite for our nations infrastructure. I believe NOWRA needs to partner with other significant organizations such as WEF to integrate onsite wastewater as an accepted infrastructure solution to enhance water quality nationally.

RANDALL MILES

Academic/Researcher Category

Profession, position & title: Mr. Miles is an Associate Professor of Soil Science in Missouri. He currently works at the University of Missouri

Years within onsite industry and/or relevant expertise and credentials: Mr. Miles has been involved in the onsite industry for 22 years and has been active in the onsite wastewater industry since the late 1980’s when he initiated an onsite wastewater research project in the Lake of Ozarks area through his teaching/research position at the University of Missouri. Since that time his involvement within the industry has increased. Some the highlights of his involvement are: Chair of state-wide stakeholder committee which initiated legislation to get the current onsite wastewater code in Missouri; founding Director of the Missouri Small Flows Organization, President of the Missouri Small Flows Organization, co-chair of a state-wide task force which assessed the effectiveness of the Missouri onsite wastewater code as well as needs to solidify the code, one three year term on the NOWRA Board, Executive Board of the Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT), and Director of the Missouri Small Flows Research/Education Training Center at the University of Missouri.

Commitment to Board position: Past involvement with CIDWT has included curriculum writing and review for practitioners and academic education and training modules. Recent involvement within CIDWT centers as a member of the writing team for the Glossary of Decentralized Wastewater Terms. From these vantage points I have had the opportunity to interact with a broad

spectrum within the onsite wastewater industry from regulators, legislators, planners, installers, soil scientists, engineers, homeowners, and designers. I firmly believe that these experiences provide a solid base level for me to communicate with the diverse audience which NOWRA board members encounter. I am willing to serve on the NOWRA Board as I firmly believe that NOWRA is the focal organization of the onsite wastewater industry. That being stated, I am a strong advocate of all of the sectors of the onsite profession: regulators, researchers, industry representatives, installers, suppliers, service providers, soil scientists, and the educators to be highly involved and contribute to the profession and NOWRA.

Industry contribution: In my role as an educator/researcher I believe I can carry the banner for NOWRA when I am invited as a speaker at various state meetings or other educational venues. From past experiences I find individuals have asked me about NOWRA, its role, and what new programs are being developed by NOWRA. If elected to the Board, I would be able to relay, first hand, what NOWRA is doing, while at the same time, listen and carry various individual’s and state organization’s concerns back to the Board.

Direction for NOWRA as an industry leader: One area which I believe NOWRA can increase its role in the profession is greater involvement with state organizations. I have had the opportunity the past 10 years of serving as an invited speaker at various state meetings. It is at this level where many individuals are exposed to new technology, new ideas and see the worth of education and certification, have the opportunity to talk with industry personnel, and interact with regulators beyond the normal in the field job. It is in this environment where the installer, designers, soil scientists, regulators, and service providers can come together for a common cause; that of raising the bar within the industry and building a positive professional image of the industry. NOWRA can and needs to be part of this positive development by fostering a strong state organization-national tie.

Critical issue(s) NOWRA should address: I strongly believe that education of homeowners, planners, regulators, and policy makers is very important for our profession. Education is one of the major activities which NOWRA can stimulate, facilitate, and foster in concert with those individuals, institutions, and training centers who are members of CIDWT. Education is the centerpiece of CIDWT starting with curriculum development, instructor training, course development and delivery. NOWRA can assist in providing various educational avenues for our state organizations. This can be accomplished by listening to the state organization as to what are the educational needs and providing the names of individuals and programs which could assist that particular state. Assisting the state organizations to be self sustaining and self-sufficient in education, information, code development, and updates with current technology could be the hallmark for NOWRA as well as a strengthening of NOWRA at the national level.

continued on page 10

RICHARD ROSE, P.E.

Engineering/Designer Category

Profession, position & title: Richard Rose is a Professional Engineer and Regulator in Santa Fe, New Mexico. He is the Chief of the Construction Programs Bureau for the State of New Mexico, Environment Department.

Years within onsite industry and/or relevant expertise and credentials: Mr. Rose has worked in the onsite industry for 32 years.

Commitment to Board position: I am particularly interested in the NOWRA national training program for installers and the model performance code. New Mexico is currently considering training requirements for installers, maintainers, and pumpers and would like to take advantage of existing educational programs. I have been promoting management of on-site systems and would appreciate other view points on how this can best be done.

Industry contribution: The issues are germane, of special interest to me, and are very relevant to my job. I want to participate in the continuing evolution of the on-site industry with particular emphasis on DECENTRALIZED MANAGEMENT. I have spoken in a number of different forums and have some experience implementing the decentralized approach. I want to share these experiences in the synergistic atmosphere of the board that has one of the longest histories in this arena.

Direction for NOWRA as an industry leader: Continue to provide leadership in the education and training programs to realize your mission and vision statement. I believe models, case studies, and templates provide jump starts for interested communities to further investigate decentralized options and NOWRA can add legitimacy to these tools.

Critical issue(s) NOWRA should address

NOWRA should be coordinating and cooperating with the other efforts to promote the decentralized approach to achieve the highest effect as noted in your mission statement. As an example, the WEF document on barriers specifically targets the engineering sector and NOWRA could provide training and encourage colleges to add course work to further this effort. The concept still faces challenges of acceptance despite the efforts of EPA and other to promote it over the past decade.

RODNEY RUSKIN

Engineering/Designer Category

Profession, position & title: Rodney Ruskin is an Engineer/Manufacturer in San Rafael, California. He is currently Chief Executive Officer of Geoflow, Inc.

Years within onsite industry and/or relevant experience and credentials: Mr. Ruskin has worked in the onsite industry for 17 years.

Commitment to Board position: My personal interests are in the applied technical side of our industry. As a COWA Board member and a NOWRA Board member I hope to be able to help in finding the best solution to the NOWRA governance issue.

Industry contribution: My main personal interests are to improve on-site technology. The COWA Board is concerned about lack of representation of the western states on the NOWRA Board and asked me to apply for this position.

Direction for NOWRA as an industry leader: The south-western U.S. is seriously under-represented on the Board. Both climate and social conditions in California, New Mexico, Arizona, Colorado, Nevada and Utah are different from the eastern parts of the country. I hope to be able to fill that gap. We need to put our very limited money and effort into true national needs and not get diverted by lesser matters.

Critical issue(s) NOWRA should address: The discussion as to how NOWRA can restructure to best serve the members, as the industry has matured and is well known to all of us. As a member of the Board of COWA, I was a vocal protagonist to keep COWA in NOWRA. By working within NOWRA I now need to assist in resolving the perceived reasons for COWA's hesitation to remain a member of NOWRA. At the same time I hope to draw into NOWRA the state associations that are not presently members of NOWRA. The issue of governance of NOWRA has to be resolved for NOWRA both to move forward and to bring in the states associations which are not members of NOWRA. Maybe the WEF model, which is a federation of Member Associations, would suite NOWRA. To see the WEF constitution, please go to <http://www.wef.org/NR/rdonlyres/AB9E3CF8-EA0D-4388-B7C7-6AEFE793A1D/0/ConstitutionandBy-lawsApproved102106.pdf>.

JUDITH SIMS

Academic/Researcher Category

Profession, position & title: Ms. Sims is a Research Associate Professor in Utah. She currently works in the Utah Water Research Laboratory at Utah State University.

Years within onsite industry and/or relevant expertise and credentials: Ms. Sims has worked in the onsite industry for 30 years.

Commitment to Board position: I would like to explore how NOWRA can better serve state associations as well as communicate to these associations the values of affiliating with a national organization. Constantly improving communication is critical to the continued success of NOWRA as the leader in representing the on-site industry.

Industry contribution: As an educator for practicing on-site professionals, I would like to help NOWRA improve its educational programs. In our educational efforts throughout the Intermountain West, we have seen the importance of developing training programs that address specific local and state regulations as well as local site and soil conditions, which is in contrast to

the use of many generic training programs that do not address educational needs of specific regulatory jurisdictions. We strongly feel that the success of the Utah On-Site Training Center has been due to our tailoring of our educational efforts to the specific needs of different groups.

We would like to explore how this approach might be incorporated into existing NOWRA educational programs to improve their effectiveness.

Direction for NOWRA as an industry leader: At the present time I have several state- and national-funded projects concerning implementation of on-site management programs at the local level. I am also beginning to investigate septage management practices in the State of Utah, with the goal of ensuring that septage is treated in a manner that will be protective of public health and the environment. We are also investigating the effectiveness of treatment of septic tank effluent in deep trenches, a type of treatment and disposal system commonly used in parts of the Intermountain West.

Critical issue(s) NOWRA should address: I believe the SW area of the U.S. is under-represented on the NOWRA Board of Directors. Climate, site and soil conditions, and social conditions in California, New Mexico, Arizona, Colorado, Nevada and Utah are different from the eastern parts of the country and I hope to be able to represent our area of the country on the NOWRA Board.

CLEMENT SOLOMON

Academic/Researcher Category

Profession, position & title: Mr. Solomon is a Civil and Environmental Engineer in Morgantown, West Virginia, and. He is currently the Program Coordinator/Director of the National Environmental Service Center at West Virginia University, NRCCE/WVU.

Years within onsite industry and/or relevant expertise and credentials: Mr. Solomon has been involved in the onsite industry for 20 years.

Commitment to Board position: I am interested in serving on the board because I believe that cooperative relationships and synergistic efforts result in better outcomes than any single organization may be able to accomplish. Over the years, I have developed and maintained “peer to peer” relationships with many members on your board. I have teamed up with them to successfully accomplish projects with multiple objectives.

Industry contribution: As program director of the NSFC, I would like to work collaboratively with NOWRA on the information and education aspects related to the onsite industry. I see the mutual benefits of us working together immensely productive and helpful in accomplishing our strategic goals and objectives. Partnering and sharing resources whenever possible will result in advancing and growing the onsite industry in an effective and efficient manner.

Direction for NOWRA as an industry leader: Strategically, I believe that we should approach the decentralized wastewater infrastructure issue in the context of watershed, sustainability and consistency in practices, protocols and procedures. In closing, I

would be pleased to serve as a member of the Board of Directors, and do understand the commitment to fulfilling the expectations, roles and responsibilities.

ED SWANSON, P.E.

Engineering/Designer Category

Profession, position & title: Mr. Swanson is a Professional Engineer in Arizona. He is currently the Senior Environmental Engineer in the Water Quality Division of the Arizona Department of Environmental Quality.

Years within onsite industry and/or relevant expertise and credentials: Mr. Swanson has worked in the onsite industry for 33 years.

Commitment to Board position: I am interested in serving on the NOWRA Board to apply my professional knowledge and experience to influence an industry whose time has come to better serve the public interest.

Industry contribution: I believe that NOWRA should work toward improving the recognition of our industry’s accomplishments by those outside our industry. This includes promoting the national recognition of the NOWRA Code work on the performance-based application of wastewater facilities. NOWRA also needs to be a strong advocate for additional research to:

1. Assess site conditions and limitations for use on a national basis,
2. Establish algorithms to statistically quantify the performance of wastewater a treatment and dispersal facilities, and
3. Level the playing field for manufacturers to compete on the attributes of verified performance.

Direction for NOWRA as an industry leader: In addition to research and communications, I would like to stimulate NOWRA programs to further promote state affiliates, student participation, and the next generation of leadership and service providers. My work with the Arizona training and qualification recognition program has helped to understand issues related to the continuity of education, leadership and qualified service providers.

Critical issue(s) NOWRA should address: Though some decision makers in the wastewater management field are biased toward using capital-intensive community facilities, continued research and communications by NOWRA about the economics and performance of onsite and decentralized technologies is needed to gain the trust of those making procurement decisions.

Other comments: I am also willing to—

1. Serve as liaison and mentor with state groups on topics, and participating as NOWRA’s official representative at meeting when requested,
2. Contribute time to participate and provide leadership, when requested, for committees and special task groups, and
3. Assist the NOWRA Board and staff to evaluate issues and develop policy from the perspectives of Engineering and the overall industry.

continued on page 12

ELLEN VAUSE

Installer/Contractor Category

Profession, position & title: Ms. Vause is an Installer/Contractor in Florida. She is the current president of Florida Septic, Inc.

Years within onsite industry and/or relevant expertise and credentials: Ms. Vause has worked with the Florida Onsite Wastewater Association (FOWA) for 20 years in all aspects of the association and has been involved in the onsite industry for 30 years.

Commitment to Board position: As a new Board member with NOWRA, I hope my experience will enable me to work on all issues. My strong points are in the areas of the Model Code, public relations, and membership. I hope to bring my experience in Florida with me and learn how I can apply this experience nationally.

Industry contribution: I believe that if you have a passion for what you believe in, you evolve into a natural leader. Passion fuels the desire to learn more and pass what is learned on to others. I am truly passionate about the Onsite industry and its benefits. For me, being a NOWRA board member will give the industry one more voice to facilitate our message.

Direction for NOWRA as an industry leader

Public awareness. If we as an industry are going to survive, we have got to change the perception that an onsite system is inferior to public waste water treatment systems (sewers). The best model code, biggest membership, education of our contractors or the best onsite system doesn't do a bit of good if a city or county can force homeowners to abandon their properly functioning systems and hook to sewer. When I attend a City or County commission meeting about expansion of collection lines into an Onsite area no amount of information or argument out-weighs the engineering consultant that recommends the expansion. Onsite Systems continue to be totally ignored as part of the overall sewage treatment for the county. The Engineers, Environmental agencies and consumer are still woefully uneducated on the facts and benefits of Onsite Systems. In Florida we have made a considerable effort to promote EPA guidelines for managed systems. We have been politely received by those mentioned above, patted on the back and sent on our way. NOWRA needs to promote National legislation to stop the unneeded expansion of sewer lines into Onsite areas and have onsite systems included as part of the treatment of the county's total waste package. ■

ONSITE *Journal*
NEWS FOR THE ONSITE WASTEWATER RECYCLING INDUSTRY

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ELECTION BALLOT

NOWRA 2008–2010 BOARD OF DIRECTORS

ALL BALLOTS must be received and dated by a postmark or fax by Midnight, October 31, 2007. All Ballots must have a membership number and signature.; Only one vote per individual/member. Individuals with multiple memberships in states can only vote once. In order to be eligible to vote, your 2007 membership must be in good-standing, i.e., 2007 dues paid in full. All ballots remain confidential. **Ballots that are not completed properly with a valid 2007 membership number, signed and dated will not be counted!**

Installer/Contractor Sector — *Vote for up to two (2)*

- Ellen Vause
- _____ (Write-in Candidate) *

Engineering/Designer Sector — *Vote for one (1)*

- Robert Mayer
- Richard Rose
- Rodney Ruskin
- Ed Swanson
- _____ (Write-in Candidate) *

Academic/Researcher Sector — *Vote for one (1)*

- Randall Miles
- Judith Sims
- Clement Solomon
- _____ (Write-in Candidate) *

*All write-in candidates must meet the eligibility requirements of the industry sector for which they are being elected and are subject to approval by NOWRA's Nominating Committee.

**THE INFORMATION BELOW MUST BE COMPLETED BEFORE YOUR BALLOT CAN BE COUNTED.
NO DUPLICATE BALLOTS ARE PERMITTED. ALL BALLOTS REMAIN CONFIDENTIAL.**

Membership Number: _____

Signature: _____

Print Name: _____

Fax or mail completed ballot by October 31, 2007 to:
NEIWPC, Attn: NOWRA Election, 116 John Street, Lowell, MA 01852
Fax: (978) 323-7919

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INSTALLER ACADEMY

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THIRD ANNUAL INSTALLER ACADEMY

December 10-12, 2007 • The Riviera Hotel, Las Vegas, NV

WHAT TO EXPECT

This unique education and training program focuses on advancing the knowledge, skills, and professionalism of all practitioners in the decentralized wastewater industry. The 2007 program has been expanded to meet the ongoing needs of installers and service providers. Here's a preview of some of the program's features.

- The first annual Roe-D-Hoe consists of timed skill activities on Bobcat equipment testing Installers' abilities. Participation in the Roe-D-Hoe allows Installers a chance to display their skills and experience while enjoying themselves at the same time. The national champion will win both a \$1,000 cash prize and a commemorative belt buckle with runner-up prizes for 2nd and 3rd place. The event will culminate with the Grand Finale National Roe-D-Hoe Championship, followed by the Awards Ceremony and Reception in the Exhibition Hall with food and refreshments provided.
- Manufacturer training rooms are available for companies to provide hands-on instruction and education about their equipment and products. These sessions give attendees a valuable opportunity to learn directly from the source about the attributes and capabilities of control panels, pumps, filters, wastewater treatment systems and other wastewater products.
- Attendees at all sessions receive CEUs for professional advancement. The Installer Academy provides incredible networking opportunities to learn the latest technologies that support customer needs and increase business.

PROGRAM HIGHLIGHTS

DAY 1

CIDWT Installation of Onsite Systems

- Installation Planning & Safety
- Piping Installation
- Soils Introduction for Installers
- ... *And Much More!*

Vendor Product Training

- Bio-Microbics

Advanced Installation Issues

- Residential Sewage Treatment System Design
- Design and Installation Problems Encountered and Solved
- Erosion Control for Septic System Installers
- ... *And Much More!*

Equipment Related Training

DAY 2

CIDWT Installation of Onsite Systems

- Media Filter Installation
- Installing Disinfection Systems
- Installing Gravity Soil Treatment Systems
- ... *And Much More!*

Vendor Product Training

- Hoot Systems
- Netafim
- Vermeer Manufacturing

Business Skills

- Sales for the Small Business Owner
- Selecting the Legal Structure for Your Business
- So . . . You Want to Start an O&M Business!
- ... *And Much More!*

1st Annual Roe-D-Hoe Competition and Awards Ceremony

DAY 3

Troubleshooting Systems

- High Strength Waste
- Troubleshooting Soil Treatment Systems
- Troubleshooting Wastewater Sources & Septic Tanks
- Troubleshooting Advanced Treatment Systems

Vendor Product Training

- Infiltrator® Systems, Inc. Introduces Aquaworx™
- Ecoflo® Peat Biofilter & Other Technologies: Installation & O&M Practices
- Eljen

Certification and Exam

- NOWRA's Model Code Certification & Inspection
- Mass Title 5 System Inspection Program
- Maine's Voluntary Installer Certification Program
- NEHA Installer Exam

Sunday, December 9th, 2007				
Time	Activity	Location		
8:00 AM - 5:00 PM	NOWRA Board Meeting	Capri 103		
Monday, December 10th, 2007				
Time	Activity	Location		
8:00 - 4:00 PM	Exhibit Hall Set-Up	Royale 5 / 6		
7:00 - 10:00 AM	Registration and Continental Breakfast	Royale Auxiliary Area		
8:00 - 8:30 AM	General Session Welcome, Jerry Stonebridge	Grande B		
8:30 - 9:30 AM	Keynote: Sustainability & Cost of Operations of Onsite Systems, Bill Stuth Sr.			
9:30 - 10:00 AM	BREAK - Royale Auxiliary Area			
Session Room	1A - Technical Royale 7&8	1B - Vendor Capri 114/115	1C - Technical Capri 112/113	1D - Practical
General Topic	CIDWT Installation of Onsite Systems	Vendor Product Training	301- Advanced Installation Issues	Equipment Related Training
10:00 - 10:45	Welcome and Professional Ethics, Bruce Lesikar	Vendor Product Training Slot A	Residential Sewage Treatment System Design: Step-by-Step, Tim Haeg	Training Details Under Development
10:45 - 12:00	Installation Planning, George Loomis		Keys to Proper Mound & At-grade Installation, Jim Converse	
12:00 - 1:00	Lunch on Your Own			
1:00 - 1:45	Installation Safety, Nancy Deal	Biomicrobics, Raymond Peat & Allison Blodig	Design & Installation Problems Encountered & Solved, Dan Tucker	Training Details Under Development
1:45 - 2:30	Piping Installation, Sara Christopherson		Creative Design Solutions for Tough Sites, Tim Haeg	
2:30 - 2:45	BREAK - Royale Auxiliary Area - Refreshments Provided			
2:45 - 3:30	Soils Intro for Installers, Nancy Deal	Biomicrobics, Raymond Peat & Allison Blodig	Erosion Control for Septic System Installers, Russell Martin	Training Details Under Development
3:30 - 4:15	Tank Installation, Dave Gustafson		They Installed It ... You're going to Warranty It & Service It ... Yikes!!! Trapper Davis	
4:15 - 5:00	ATU Installation, Bruce Lesikar		Common Construction Errors: What the Inspector Sees, B37 Tim Haeg	
5:00 - 7:00	Exhibit Hall Opening Reception, Refreshments Provided - Royale 5/6			
Tuesday, December 11th, 2007				
7:00 - 10:30	Continental Breakfast Available - Exhibition Hall - Royale 5/6			
Session Room	2A - Technical Royale 7&8	2B - Vendor Capri 114/115	2C - Business Capri 112/113	2D - Roe-D-Hoe North Parking Lot
General Topic	CIDWT Installation of Onsite Systems	Vendor Product Training	Business 101	Installer Skill Competition
7:30 - 8:00	Homework Review, Dave Kalen			1st Annual Roe-D-Hoe Competition
8:00 - 8:45	Media Filter Installation, George Loomis	Netafim Wastewater Dripperline & Components, Mike Stoll	Sales for the Small Business Owner 101, Frank Taciak	
8:45 - 9:30		Vermeer Manufacturing Construction & Drip Dispersal Installation Equipment, Jim Reeves	Selecting the Legal Structure for Your Business, Al Schnitkey	
9:30 - 10:00	Installing Disinfection Systems, Dave Kalen			
10:00 - 10:30	BREAK - Exhibition Hall - Royale 5/6 - Refreshments Provided			

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Tuesday, December 11th, 2007 (continued)				
10:30 - 11:15	Installing Gravity Soil Treatment Systems, Sara Christopherson	Vendor Training Room Available - Slot B	Financial Management and your Business, Brian McQuestion	1st Annual Roe-D-Hoe Competition
11:15 - 12:00				
12:00 - 1:00 Lunch Provided in Exhibition Hall - Royale 5/6				
1:00 - 1:45	Installing Pressure Dose Systems: Pumps & Controls, Dave Gustafson	Hoot Systems Products Introduction, Ron Suchecki and Troy Cormier	Managing Your Business, Howard Wingert	1st Annual Roe-D-Hoe Competition
1:45 - 2:30				
2:30 - 3:00 BREAK - Exhibition Hall - Royale 5/6 - Refreshments Provided				
3:00 - 3:45	Low Pressure Pipe Systems, Nancy Deal	Hoot Systems Products Introduction, Ron Suchecki and Troy Cormier	So ... You want to start an O&M Business !!! Trapper Davis	
3:45 - 4:30	Installing Drip Distribution Systems, Bruce Lesikar		Business Roundtable Discussion	
4:30 - 5:00	Installing Bottomless Media Filters, David Kalen			
5:15 - 6:00 Grand Finale: National Roe-D-Hoe Championship, North Parking Lot				
6:00 - 7:30 Roe-D-Hoe Award Ceremony and Reception - Exhibition Hall - Royale 5/6				

Wednesday, December 12th, 2007				
Session Room	3A - Technical Royal 7&8	3B - Vendor Product Training Capri 114/115	3C - Practical Capri 112/113	3D-No training current scheduled
General Topic	301 - Troubleshooting Systems	Vendor Product Training	Certification & Exam	
7:00 - 10:30 AM Continental Breakfast Available - Exhibition Hall				
8:00 - 9:00	Pump Selection and Control Basics, Darren Meyers	Infiltrator® Systems, Inc Introduces Aquaworx™, Dennis Hallahan	NOWRA's Model Code: Certification & Inspection, Tony Smithson	
9:00 - 10:00	High Strength Waste, Russell Martin		Mass Title 5 System Inspection Program, Tom Groves	
10:00 - 10:30 BREAK - Exhibition Hall - Royale 5/6 - Hall Closes at 12:00				
10:30 - 12:00	Troubleshooting Soil Treatment Systems, Jim Anderson	Ecoflo® Peat Biofilter & Other Technologies; Installation & O&M Practices, Mary Clark	Maine's Voluntary Installer Certification Program, Russell Martin	
12:00 - 1:00 Lunch on Your Own				
1:00 - 2:15	Troubleshooting Wastewater Sources & Septic Tanks, Bruce Lesikar	The Eljen Geotextile Sand Filter, James Donlin	NEHA Installer Exam	
2:15 - 3:00				
3:00 - 3:30 BREAK - Royale Auxiliary Area				
3:30 - 4:15	Troubleshooting Advanced Treatment Systems, Bruce Lesikar	Vendor Product Training Slot B	NEHA Installer Exam Continued	
4:15 - 5:00				

CIDWT Pilot Installer Training Program

The Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT), often referred to as "The Consortium," is a group of professionals from educational institutions, training entities, private industry, regulatory agencies as well as citizens' groups. These professionals cooperate on decentralized wastewater research and outreach training and education.

CIDWT is working cooperatively with NOWRA and NEHA to establish and communicate a set of minimum guidelines for the installation of onsite wastewater treatment systems. The curriculum is designed to support the NEHA Certified Installer of Onsite Wastewater Treatment Systems (COWTS) credential. CIDWT has enlisted a group of installers from across the country to provide input on a guidance document and training materials. In cooperation with NOWRA, CIDWT will conduct the first of four pilot training events using these materials during the 2007 Installer show. This is not only an opportunity for the CIDWT writing team to gauge the effectiveness of these critical training materials, it also allows installers to take advantage of a unique training opportunity by participating in the curriculum development process. The instructors for this program are nationally recognized for their expertise and effectiveness as educators and their ability to work with stakeholders to develop high-quality, peer-reviewed curriculum materials that are being used both nationally and internationally.

MONDAY, DECEMBER 10

10:00 am – 10:45 am • Room Location: Royale 7 & 8

I-T-07-01 Welcome and Professional Ethics

Course Instructor: Bruce Lesikar, Professor, Texas Cooperative Extension, Biological and Agricultural Engineering Department

This session gives an overview of the installation training program. The development of a professional installer requires effective communication between the installer, facility owner, designer and regulatory community. Documentation will be discussed that facilitates this effective communication. Available educational resources will be described.

10:45 am – 12:00 pm • Room Location: Royale 7 & 8

I-T-07-02 Installation Planning

Course Instructor: George Loomis, Research and Extension Soil Scientist, College of Env and Life Sciences, University of Rhode Island

The onsite wastewater treatment system must be installed in a manner to work effectively with the site. The installer must review the construction plans to determine the best approach for constructing the system and develop a construction plan which matches the site constraints. Approaches and considerations for developing and implementing the construction plan will be presented.

1:00 pm – 1:45 pm • Room Location: Royale 7 & 8

I-T-07-03 Installation Safety

Course Instructor: Nancy Deal, Extension Associate, Soil Science Department, North Carolina State University

Safety is a necessary consideration for any business. The construction process for onsite wastewater treatment systems has several installation practices that must be performed in a safe manner. OSHA construction practices must be followed on the job site to limit the risk of worker injuries and the contractor's exposure to liability. OSHA terminology and safety practices will be discussed.

1:45 pm – 2:30 pm • Room Location: Royale 7 & 8

I-T-07-04 Piping Installation

Course Instructor: Sara Christopherson, State Extension Specialist, Onsite Sewage Treatment Program, University of Minnesota

Piping is used to convey influent and effluent to system components. Critical information describing methods for installing piping in a manner that limits movement following installation will be presented. Key methods for facilitating long-term management are included.

2:45 pm – 3:30 pm • Room Location: Royale 7 & 8

I-T-07-05 Soils Intro for Installers

Course Instructor: Nancy Deal, Extension Associate, Soil Science Department, North Carolina State University

Part of the installation process is having a system that works effectively with the site conditions to achieve wastewater treatment. Topics covered include knowing the soils for the site, being able to identify and understand the soils information, having the ability to interpret the soil conditions to achieve a good installation and the processes describing water movement through soils.

3:30 pm – 4:15 pm • Room Location: Royale 7 & 8

I-T-07-06 Tank Installation

Course Instructor: Dave Gustafson, Civil Engineer, University of Minnesota

Appropriate tank installation will facilitate long-term performance of the wastewater treatment system. Tanks are constructed of various materials and serve a variety of purposes. All tanks must be installed in a stable manner to achieve a watertight treatment system with accessibility for performing appropriate operation and maintenance. The key steps of installation will be presented.

4:15 pm – 5:00 pm • Room Location: Royale 7 & 8

I-T-07-07 ATU Installation

Course Instructor: Bruce Lesikar, Professor, Texas Cooperative Extension, Biological and Agricultural Engineering Department

The components of an aerobic treatment unit will be discussed with respect to their expected operational criteria and their associated installation practices will be presented. Construction techniques will be discussed that facilitate system stability, accessibility, and long-term performance.

TUESDAY, DECEMBER 11

8:00 am – 9:30 am – Room Location: Royale 7 & 8

II-T-07-08 – Media Filter Installation

Course Instructor: George Loomis, Research and Extension Soil Scientist, College of Env. and Life Sciences, University of Rhode Island

Media filter components will be presented with respect to expected operational criteria and the media filter treatment train with appropriate critical construction practices addressed.

9:30 am – 10:00 am – Room Location: Royale 7 & 8

II-T-07-09 – Installing Disinfection Systems

Course Instructor: Dave Kalen, University of Rhode Island, Cooperative Extension Onsite Wastewater Training Center

Disinfection is a critical part of many treatment trains located across the country. Disinfection methods and effective approaches to installing these systems will be discussed.

10:30 am – 12:00 pm – Room Location: Royale 7 & 8

II-T-07-10 – Installing Gravity Soil Treatment Systems

Course Instructor: Sara Christopherson, State Extension Specialist, Onsite Sewage Treatment Program, University of Minnesota

Soil treatment systems are the final component of the onsite wastewater treatment system. The soil distribution technologies and their associated components are presented with a discussion on estimation of material needs. The key considerations for installation of soil distribution systems that are able to accept and treat wastewater will be presented.

1:00 pm – 2:30 pm • Room Location: Royale 7 & 8

II-T-07-11 – Installing Pressure Dose Systems:
Pumps & Controls

Course Instructor: Dave Gustafson, Civil Engineer, University of Minnesota

Pumps are used to convey sewage and effluent in onsite wastewater treatment systems. The different types of pumps and their associated purposes will be discussed. Proper pump selection and sizing criteria will be identified. Appropriate construction methods for installation of pumps, controls and the discharge assembly are presented.

3:00 pm – 3:45 pm • Room Location: Royale 7 & 8

II-T-07-12 – Low Pressure Pipe Systems

Course Instructor: Nancy Deal, Extension Associate, Soil Science Department, North Carolina State University

Pressure distribution systems uniformly distribute effluent across the soil treatment area. The components of a pressure distribution system will be discussed with respect to critical construction considerations. These systems must be constructed in a manner to facilitate the operation and maintenance activities.

3:45 pm – 4:30 pm • Room Location: Royale 7 & 8

II-T-07-13 – Installing Drip Distribution Systems

Course Instructor: Bruce Lesikar, Professor, Texas Cooperative Extension, Biological and Agricultural Engineering Department

Drip distribution system components and potential treatment trains will be discussed. The critical considerations regarding the installation of the drip distribution technology components in a manner that provides long-term performance are presented. Key differences between drip distribution and other pressure distribution methods will be highlighted. Simple but critical guidelines will be provided that facilitate system stability, accessibility, and long-term performance.

4:30 pm – 5:00 pm • Room Location: Royale 7 & 8

II-T-07-14 – Installing Bottomless Media Filters

Course Instructor: Dave Kalen, University of Rhode Island Cooperative Extension Onsite Wastewater Training Center

Media filters are used as a treatment and dispersal system in some areas of the country. Critical installation considerations will be discussed that facilitate the use of media filters as a dispersal technology.

WEDNESDAY, DECEMBER 12

1:00 pm – 3:00 pm, 3:30 pm – 5:00 pm

Room Location: Capri 112/113

NEHA Installer Exam

OTHER TECHNICAL SESSIONS

MONDAY, DECEMBER 10

10:00 am – 10:45 am • Room Location: Capri 112/113

IV-T-07-17 Residential Sewage Treatment System
Design: Step-by-Step

Course Instructor: Tim Haeg, Founder, Watab, Inc., Minnesota

This presentation provides an overview of the design process for those who typically only install or inspect. The goal of this training is to provide an understanding of the design process and product to make it easier for everyone to do their job.

10:45 am – 12:00 pm • Room Location: Capri 112/113

IV-T-07-18 Keys to Proper Mound and
At-Grade Installation

Course Instructor: James Converse, Emeritus Professor, Biological Systems Engineering, University of Wisconsin-Madison

This presentation highlights the key aspects of mound and at-grade construction to assure long term performance of both types of soil treatment systems. Topics include proper siting and setbacks, necessary equipment, site preparation techniques, material options and quality, pressure distribution systems and landscaping.

1:00 pm – 1:45 pm • Room Location: Capri 112/113

IV-T-07-19 Design and Installation Problems
Encountered and Solved

Course Instructor: Dan Tucker, Instructor, Mining & Petroleum Training Serv., Kenai Peninsula College, University of Alaska

Session highlights include: 1) plan the job right even if it takes a stretch of the imagination to do it, 2) do the job right the first time, and 3) learn from the mistakes and omissions of others. The reality of installing systems is that conditions on location are often far different from those expected or planned by designers/planners. This presentation highlights unique and challenging situations and workable and successful solutions.

1:45 pm – 2:30 pm • Room Location: Capri 112/113

IV-T-07-20 Creative Design Solutions for
Tough Sites

Course Instructor: Tim Haeg, Founder, Watab, Inc., Minnesota

No space, poor soils, extreme topography, high water table. It's been said that "all of the good sites are gone," and sometimes it seems that is the case. This presentation highlights some case studies showing creative solutions to many of the common problems encountered.

2:45 pm – 3:30 pm • Room Location: Capri 112/113

IV-T-07-21 Erosion Control for Septic System
Installers

Course Instructor: Russell Martin, Director, Subsurface Wastewater Disposal Program, Maine

This presentation will provide a general overview of erosion and sedimentation control - why the installer should be concerned and what measures are necessary when installing onsite systems.

3:30 pm – 4:15 pm • Room Location: Capri 112/113

IV-T-07-22 They Installed It, Now You're Going to Warranty and Service It . . . Yikes!

Course Instructor: K.R. "Trapper" Davis, Founder, Coastal Plains Environmental Group, Virginia

This session presents key issues to the installation of alternative treatment systems that a service provider company needs to be aware of prior to writing a contract. Some of these items won't become a problem until 12+ months have gone by and now someone has to pay to fix the problem. Will it be you, your client, or a third party who has to write the check?

4:15 pm – 5:00 pm • Room Location: Capri 112/113

IV-T-07-23 Common Construction Errors: What the Inspector Sees

Course Instructor: Tim Haeg, Founder, Watab, Inc., Minnesota

We've all heard about them, we've seen some of them; maybe we've done some of them. Learning from our mistakes (and those of others) makes for better systems and a stronger industry.

TUESDAY, DECEMBER 11**8:00 am – 8:45 am • Room Location: Capri 112/113**

VII-B-07-30 Sales for the Small Business Owner 101

Course Instructor: Frank Taciak, President, C.A.Taciak & Sons, Maryland

This session includes an introduction to business (customer service, marketing, sales 101); the sales process (customer service, initial call and the first 10 seconds, the meeting and the first 10 seconds, sell more than price, get the OK); customer service; ideas from other sales people; and the follow-up (marketing).

8:45 am – 10:00 am • Room Location: Capri 112/113

VII-B-07-31 Selecting the Legal Structure for Your Business

Course Instructor: Al Schnitkey, Vice President, Ring Industrial Group, Tennessee

This session presents the following topics: sole proprietorship, partnerships, corporation and limited liability corporations. Each of the four types of businesses will be reviewed within the following areas: getting started, control, liability, continuity and transferability, taxes and pros and cons.

10:30 am – 12:00 pm • Room Location: Capri 112/113

VII-B-07-32 Financial Management and Your Business

Course Instructor: Brian McQuestion, Controller and Sales Manager, Lakeshore Burial Vault Company, Wisconsin

This session presents important knowledge and practices on the following topics: Determining What Your Business Does (How do you define your business, What are you selling, What are your costs); Accounting Principles (Accrual verses cash basis, Reporting principles, Internal controls, Basic accounting statements); Balance Sheet; Profit and Loss Statements; Statements of Cash Flows (Determining costs); Direct and Indirect Costs; IRS and Federal Tax Issues; and Budgeting.

1:00 pm – 2:30 pm • Room Location: Capri 112/113

VII-B-07-33 Managing Your Business

Course Instructor: Howard Wingert, President/Owner, Concrete Sealants, Inc., Ohio

Topics in this session include: Leadership and Leadership Traits (Essentials for effective leadership, Learning to delegate, Determining your leadership style, Mentoring your employees); Decisions Making Techniques (Steps for becoming an effective decision-maker, Managing your time more effectively); Managing Employees (Employee handbooks, Incentive programs, Benefit programs); Marketing Your Products and Services (Niche marketing strategies, Strategies for seasonal sales, Use of customer databases, Keeping track of your competitors, Surveying your customers, Effective distribution of samples, Promoting quality and expertise as a marketing strategy, After sales follow-up); Selecting Insurance (Essential insurance for a small business, How to work effectively with your insurance provider); Business Financing Strategies (Factors to consider when borrowing money, Leasing equipment verses purchasing); Exit Strategies (Planning your exit, Considerations before selling your business, Transfer of ownership).

3:00 pm – 3:45 pm • Room Location: Capri 112/113

VII-B-07-34 So . . . You Want to Start an O&M Business!

Course Instructor: K.R. "Trapper" Davis, Founder, Coastal Plains Environmental Group, Virginia

This session presents such important topics as contract writing, training requirements for personnel, cost of start-up for a basic O&M Service Company, and some of those "hidden" industry secrets to getting started and making a living at providing Operation and Maintenance.

3:45 pm – 5:00 pm • Room Location: Capri 112/113

VII-B-07-35 – Business Roundtable Discussion

Course Instructor: This session will be moderated by speakers from previous sessions.

This session will provide an opportunity for attendees to share experience and discuss varying issues.

WEDNESDAY, DECEMBER 12**9:00 am – 10:00 am • Room Location: Royale 7 & 8**

VIII-T-07-36 High Strength Waste

Course Instructor: Russell Martin, Director, Subsurface Wastewater Disposal Program, Maine

This presentation begins with definitions and characteristics of high strength waste as well as typical generators. Various treatment methods will then be covered. Permitting and inspection topics will be addressed as well as operation and maintenance.

10:30 am – 12:00 pm • Room Location: Royale 7 & 8

VIII-T-07-37 Troubleshooting Soil Treatment Systems
Course Instructor: Jim Anderson, Water Resources Center, University of Minnesota

Troubleshooting soil treatment systems looks at the impact of distribution systems, gravity and pressure, and what items to look for if someone is investigating a system that is exhibiting problems. This includes looking at elevation differences, modes of gravity distribution, using inspection pipes in different parts of the system and how to install monitoring devices

1:00 pm – 3:00 pm • Room Location: Royale 7 & 8

VIII-T-07-38 Troubleshooting Wastewater Sources and Septic Tanks

Course Instructor: Bruce Lesikar, Professor, Texas Cooperative Extension, Biological and Agricultural Engineering Department

The quality and quantity of wastewater can greatly impact the overall performance of any onsite system. Identifying and understanding the varying parameters is a key skill to properly troubleshooting a system experiencing performance problems. This session will highlight many of the common problems with varying sources of wastewater. Septic tank performance issues will also be discussed.

3:30 pm – 5:00 pm • Room Location: Royale 7 & 8

VIII-T-07-39 Troubleshooting Advanced Treatment Systems

Course Instructor: Bruce Lesikar, Professor, Texas Cooperative Extension, Biological and Agricultural Engineering Department

This session will highlight the numerous causes of problems with advanced treatment systems including ATUs, media filters and constructed wetlands.

8:00 am – 9:00 am • Room Location: Capri 112/113

X-P-07-43 NOWRA's Model Code: Certification and Inspection

Course Instructor: Anthony Smithson, Director, Environmental Health, Lake County Health Department, Illinois

Part of NOWRA's model code certification is a key parameter necessary for moving the decentralized industry forward. Licensing/certification of all practitioners is the fundamental link to maintaining high standards of competence and conduct. Continuing education is a central tenet for licensing and certification programs. In addition, governmental regulatory agencies must have continuous oversight of the performance of all onsite wastewater treatment systems. The system owner (either property owner or management district) is responsible for maintaining compliance. Permitting and inspection options will be discussed.

9:00 am – 10:00 am • Room Location: Capri 112/113

X-P-07-443 Massachusetts Title 5 System Inspection Program

Course Instructor: Tom Groves, Director of Wastewater and Onsite Programs, NEIWPC, Massachusetts


NEIWPC is now coordinating the Massachusetts Title 5 (state onsite sanitary code) Onsite Wastewater Training, Examination, and Certification of Soil Evaluators and System Inspectors. In April 2004, the Massachusetts Department of Environmental Protection transferred the programs to NEIWPC, which will conduct the training and exams as well as chair an Onsite Advisory Committee (OAC) that was established to oversee these efforts. This presentation will describe the System Inspection training, process, and certification in Massachusetts.

10:30 am – 12:00 pm • Room Location: Capri 112/113

X-P-07-45 Maine's Voluntary Installer Certification Program

Course Instructor: Russell Martin, Director, Subsurface Wastewater Disposal Program, Maine

This presentation describes the voluntary certification process in the state of Maine. Topics include how the process works, benefits, examples of training and numbers of certified individuals



Sponsored by
Bobcat Equipment
 A PAPÉ COMPANY

TUESDAY,
DECEMBER 11


For more information,
 please contact:
 JR Inman • 253-848-2371
 jr@nwcascade.com
 or
 Raymond Peat
 1-800-753-3278
 rpeat@biomicrobics.com

NOWRA's 1st Annual National Roe-D-Hoe skill competition is being held at NOWRA's 3rd Annual Installer Academy on Tuesday, December 11th. This one-day event consists of timed skill activities on Bobcat equipment testing installers' abilities. Participation in the Roe-D-Hoe allows installers a chance to display their skills and experience, while enjoying themselves at the same time. The backhoe Roe-D-Hoe is "fun," but takes skill and "tests even the most seasoned operator." The winner must successfully complete all tests in the shortest total time. The national champion will win both a \$1,000 cash prize and a commemorative belt buckle with runner-up prizes for 2nd and 3rd place.

The Roe-D-Hoe will culminate with the Grand Finale National Roe-D-Hoe Championship, followed by the Awards Ceremony and Reception in the Exhibition Hall with food and refreshments provided. The participation fee is \$20. You may pre-register with your Installer Academy registration or at the event.

The Roe-D-Hoe is sponsored by Bobcat Equipment, a Papé company, with equipment provided by Bobcat of Las Vegas, Inc. Bobcat's mission is to be recognized as a world leader in the engineering, manufacture and marketing of compact, industrial, construction and agri-business equipment, attachments and related products.

The Papé Family acquired its first capital equipment dealership in Oregon's Willamette Valley in 1938. From those simple roots, the company has grown to become the West's premier capital equipment sales and service organization. With locations in seven Western states, Papé companies serve customers in heavy equipment, forestry, materials handling, agriculture, warehousing, construction, and business aviation.



BOBCAT
WEST
 A PAPÉ COMPANY

**Bio-Microbics' FAST System:
Installation and O&M**

Mon. Dec. 10, 2007 • 1:00 pm–2:30 pm, 2:45 pm–5:00 pm
Room Location: Capri 114/115

Instructors: Alison Blodig, Regulatory Affairs Coordinator, Bio-Microbics, Kansas; and Raymond Peat, Vice President of Marketing, Bio-Microbics, Kansas

This product session provides a general FAST training to include installation, operation, and maintenance that will satisfy the requirements of most state programs including Texas (not including drain-field or spray irrigation information) and Massachusetts.

Netafim USA

Tues. Dec. 11, 2007 • 8:00 am – 10:00 am
Room Location: Capri 114/115

Instructors: Mike Stoll, Wastewater Division Market Manager, Netafim, New York

This Certification Class will cover why dripperline is such an important technology for today and the future. The operation and application of Netafim Bioline dripperline will be discussed, as well as design, installation, and winterization concepts. This class will be conducted in conjunction with Vermeer Manufacturing, a Netafim strategic partner.

Vermeer Manufacturing

Tues. Dec. 11, 2007 • 9:00 am – 10:00 am
Room Location: Capri 114/115

Instructors: Jim Reeves, Product Trainer, Vermeer Manufacturing, Iowa
Vermeer's broad range of labor-saving equipment will be described with special emphasis on the Vermeer MB-40 multi-blade plow. This versatile plow was specially designed to install 3 rows of Netafim Bioline with virtually no disruption to the dispersal field. Other labor-saving equipment designed to support tank and field installations will be presented.

Hoot Systems Products

Tues. Dec. 11, 2007 • 1:00 pm–2:30 pm, 3:00 pm–5:00 pm •
Room Location: Capri 114/115

Instructors: Ron Suchecki, Research and Development Director and General Manager, Texas; and Troy Cormier, Vice President of Business Development, Louisiana

HOOT Systems manufactures complete NSF Certified Standard 40 and Standard 245 Advanced Onsite Wastewater Treatment and Disposal Systems which can produce effluent results of less than 3/2/6 CBOD5, TSS and Total Nitrogen. Hoot representatives will discuss the design and use of their advanced treatment systems with a wide range of applications. Since 1976, Hoot has worked to refine the process of onsite wastewater treatment, rather than continually reinventing it. Working today to protect tomorrow's environment. For more info, check us out on the web at: www.hootsystems.com or call (888)878-HOOT.

**Infiltrator® Systems, Inc. Introduces
Aquaworx™: A New Product Line of Advanced
Wastewater Solutions Training & Certification**

Wed. Dec. 12, 2007 • 8:00 am – 10:00 am
Room Location: Capri 114/115

Instructor: Dennis Hallahan, P.E., Technical Director, Infiltrator® Systems, Inc., Connecticut

ISI's Technical Director will conduct an overview detailing the workings of the Aquaworx™ line of advanced wastewater solutions. Additionally, those interested participants may attend a 1 hour Certification Class including product demonstrations.

**Ecoflo® Peat Biofilter & Other Technologies:
Installation & O&M Practices**

Wed. Dec. 12, 2007 • 10:30 am – 12:00 pm
Room Location: Capri 114/115

Instructor: Mary Clark, Government and Partner Relations Director, Premier Tech Environment, Quebec

Presentation of 3 types of Ecoflo® biofilters: open bottom fiberglass, closed bottom fiberglass, and concrete units. Presentation will include a description of site conditions, basic design parameters, installation and inspection practices, sampling, operation and maintenance, data-base tracking, and peat replacement. In addition, the nitrogen-reducing Ecoflex® combined peat and geotextile biofilter will be presented.

Eljen Corporation

Wed. Dec. 12, 2007 • 1:00 pm – 3:00 pm
Room Location: Capri 114/115

Instructor: Jim Donlin, Vice President of Operations/Manufacturing, Eljen Corporation, Connecticut

This session details how the Geotextile Sand Filter functions as a passive alternative for obtaining a secondary level of treatment. Internal surface area comparisons and recent treatment testing were conducted at the Massachusetts Alternative Septic System Testing Center, MASSTC. Installation procedures for a wide variety of site conditions will be explained in detail.

Register Today!
End the year at
what will surely
become an annual part of
your business travels!

EXHIBITOR SPONSORSHIP OPPORTUNITIES

NOWRA has several sponsorship opportunities available for various events over the course of the 3-day Installer Academy. Sponsorship is available for Monday's Reception, Tuesday's Pizza Lunch, and Tuesday's Roe-D-Hoe Awards Ceremony.

If your company is interested in being a 3rd Annual Installer Academy Sponsor, please contact the NOWRA office at 800-966-2942 or email us at executivedirector@nowra.com.

Booth #12

Advanced Wastewater Systems
19992 N Manchester Road, Sunman, IN
47041
Phone: 812-926-4282
Fax: 812-926-3053
www.superseptic tanks.com

Booth #35

Bio-Microbics, Inc.
8450 Cole Parkway, Shawnee, KS 66227
Phone: 913-442-0707
Fax: 913-422-0808
www.biomicrobics.com

With a worldwide emphasis on improving water quality, people everywhere recognize the need for new technologies and infrastructure to support growing populations and protect our fragile ecosystem. Bio-Microbics manufactures a variety of innovative wastewater technologies that provide quick, affordable and sustainable infrastructure improvements for decentralized communities across the globe.

Booth #24

Bord na Mona
P.O. Box 77457, Greensboro, NC 27417
Phone: 336-547-9338
Fax: 336-547-8559
www.bnm-us.com

Bord na Mona Environmental Products is a provider of wastewater solutions to the residential and commercial sectors including PuraFlo peat fibre media biofilters, PuraMax moving bed biological reactor activated sludge systems and PuraM membrane bioreactor systems from single homes up to community projects in excess of one million gpd.

Booth #28

Concrete Sealants
P.O. Box 176, New Carlisle OH 45344
Phone: 800-332-7325
Fax: 937-845-3587
www.conseal.com

Concrete Sealants is a manufacturer of sealants, extruded sealing tapes, primers, wraps, waterstops, water-based coatings, mastics, hot-melts, lubricants and release agents. Con Seal's products are used to assemble and seal a variety of structures and in the wastewater industry to insure watertight integrity. Concrete Sealants is an ISO-9001:2000 registered company.

Booth #13

Eljen Corporation
125 A McKee Street, East Hartford, CT 06108
Phone: 860-610-0426
Fax: 860-610-0427
www.eljen.com

Eljen Geotextile Sand Filter (GSF), no-aggregate passive alternative treatment/disposal leach field. MASSTC data-GSF treatment less

than 5 BOD 5 TSS, with 12 inches of sand. Many state approvals at 50-60% reduction over aggregate septic fields. Retains hydraulic effectiveness indefinitely, virtually no biomat on bottom. 50,000 installations, 20 years.

Booth #31

Geoflow
506 Tamal Plaza, Suite 506, Corte Madera, CA
94925
Phone: 800-828-3388
Fax: 415-927-0120
info@geoflow.com

Geoflow developed WASTEFLOW® dripline to disperse onsite wastewater below ground. The effluent is placed slowly and uniformly through the root zone, with the dispersal suitable for difficult sites. WASTEFLOW® is built to last with ROOTGUARD® inhibitor molded into each emitter and ULTRAFRESH® protection against slime build-up along the dripline wall.

Booth #30

Hoot Systems, Inc.
2885 Highway 14 E, Lake Charles, LA 70607
Phone: 337-474-2804
Fax: 337-477-7904
www.hootsystems.com

Hoot Systems manufactures performance-based, NSF standard 40 certified onsite wastewater treatment systems which produce effluent results of less than 3/2/6 CBOD5, TSS and total nitrogen. Since 1976, Hoot has worked to refine the process of wastewater treatment rather than continually reinventing it. Hoot, protecting tomorrow's environment today.

Booth # 3

Infiltrator Systems, Inc.
6 Business Park Road, Old Saybrook, CT 06475
Phone: 860-577-7000
Fax: 860-577-7001
www.infiltratorsystems.com

Infiltrator Systems is the world's leading and original manufacturer of plastic leaching chambers for environmental onsite wastewater solutions. Our Quick4® Chambers are the quickest drainfield installation in the onsite industry. These next generation chambers offer exceptional strength, more installation flexibility, advanced contouring capability, and multiple piping options.

Booth # 10

Netafim USA
5470 E Home Avenue, Fresno, CA 93727
Phone: 559-453-6800
Fax: 559-453-6803
www.netafimusa.com

Netafim is the largest manufacturer of drip and drip dispersal systems in the world. Bioline® drip dispersal tubing is the only tubing with a full 10-year warranty against root intrusion. Netafim also offers valves from 3/4" - 24", filters from 1 - 4,500+ GPM, air vents, water meters and hydrometers.

Booth #23

Premier Tech Environment
6 Avenue Premier, Riviere du Lup, Quebec
G5R6C1
Phone: 418-867-8883 ext 6556
Fax: 418-862-6642
www.ptenv.com

Recognized in Canada, the United States and France, Premier Tech Environment is active in onsite wastewater treatment for the residential, commercial, industrial, institutional and municipal sectors. Premier Tech Environment has set the standard in its field through the innovations and technologies it has brought to markets for over 10 years.

Booth #1

Ring Industrial Group, LP
65 Industrial Park, Oakland, TN 38060
Phone: 800-649-0253
Fax: 866-279-9203
www.RingIndustrial.com

RING Industrial Group's EZflow Drainage System is the leading geosynthetic aggregate pipe system for use in septic leach fields. EZflow's patented design affords consumers maximum system life and performance, lower system costs, and an environmentally friendly alternative. Headquartered in Oakland, TN, RING Industrial Group, LP is a wholly owned subsidiary of RING Corporation.

Booth #29

Wieser Concrete Products, Inc.
W3716 US Highway 10, Maiden Rock, WI
54750
Phone: 800-325-8456
Fax: 715-647-5181
www.wieserconcrete.com

NPCA Certified Precast Manufacturer, Wieser Concrete, has established itself as a leader in the design and construction of cost-effective, environmentally-responsible products for onsite wastewater systems. Wieser's product line includes tanks to 40,000 gallons including tanks for Bio-Microbics and Nibblers, sand filters. Wieser Concrete delivers and sets tanks nationwide. Wieser Concrete . . . experience that matters.

Booth #22

Zoeller Pump Company
3649 Cane Run Road, Louisville, KY 40211
Phone: 800-928-7867 X 8113
Fax: 502-774-3624
wesc@zoeller.com

Manufacturer of a complete line of effluent, sewage, grinder and dewatering pumps. Controls, basins and accessories for complete lift stations. STEP systems, effluent filters, "True-Flow" splitter boxes and secondary treatment packages such as recirculating media filters and the new Fusion Series Treatment System are available to meet all On-Site needs. Come visit us at Booth 22!

NOWRA'S THIRD ANNUAL INSTALLER ACADEMY TRADE SHOW

December 10-12, 2007 • The Riviera Hotel, Las Vegas, Nevada
1st Floor • Royale 5/6 • 2901 Las Vegas Boulevard South • 1-800-634-6753

TRADE SHOW SCHEDULE

Booth Set-Up	Monday, December 10	10:00 am - 4:00 pm
Evening Socials	Monday, December 10	5:00 – 7:00 p.m.
	Tuesday, December 11	5:00 – 7:00 p.m.
Exposition Hours	Monday, December 10	5:00 pm - 7:00 pm
	Tuesday, December 11	7:00 am - 8:00 am 10:00 am - 10:30 am 12:00 pm - 1:00 pm 2:30 pm - 3:00 pm 5:00 pm - 7:00 pm
	Wednesday, December 12	7:00 am - 11:00 am
Breakdown	Wednesday, December 12	11:00 am. (after morning break)

- Booth staffing during technical sessions is optional.
- All non-technical activities and breaks are held in the Exhibit Hall (Royale 5/6) at designated times.
- The Exhibit Hall will be locked during evening hours.
- NOWRA reserves the right to remove materials from the Exhibit Hall or reject a registration for any reason.
- All booths are set up as defined in the floor plan.
- All drapery is clean, properly hemmed and flameproof in accordance with local fire regulations.
- The hall has permanent carpet.

EXHIBIT BOOTH INFORMATION

Location: Royale 5/6
Space Size: 10 x 10 booth
Members Rate: \$1000
Non-Members Rate: \$1250
Additional Booth Personnel: \$175 each

Included with fees:

- Two full registrations
- One 7" x 44" one-line, black on white identification sign to include booth number
- One 8' x 30" table topped in white vinyl and skirted on three sides
- Booth back drapes, 8' high with two 36"-high side dividers, supported by a steel framework.
- Two chairs & wastebasket

FAQ'S

How Do I Reserve A Booth?

1. Complete and sign the "Exposition Reservation Form and Contract."
2. Review NOWRA's Policy and Procedures, available on our website at www.nowra.org/exhibitor.html.
3. Mail the Contract with your check* (payable in U.S. \$\$) to NOWRA, P. O. Box 1270, Edgewater, MD 21037-7270; OR Fax the form with credit card payment to 410-798-5741.
4. When registration is complete and paid for, exhibitors receive confirmation and booth space assignment from the NOWRA office. Exhibitor kits are provided with order forms for electric, telephone and other booth needs, provided by Las Vegas Expo.**

*Returned checks will be charged a \$50.00 fee.

**Reservations received after December 1, 2007 will be accepted on a space available basis, with an additional late fee of \$200.

How Do I Make Sure I Reserve the Booth I Want? Booths are assigned on a first-come, first-served basis with priority given to NOWRA Business Benefit Program members, Sponsors and Advertisers. Every effort will be made to accommodate your booth request.

What If I Have to Cancel My Booth Reservation? If an exhibitor cancels on or before December 1, 2007, a full refund, less \$150 processing fee, will be given. If an exhibitor cancels after December 1, there will be no refund, unless the Exposition is sold out and the space can be reassigned, in which case the exhibitor will pay 25% of the total contract fee.

How Do I Cancel My Reservation? Exhibitors must first contact the NOWRA office to cancel space reservations. **A cancellation is not effective until it has been received in writing from the exhibitor.** Signed cancellations may be sent via facsimile (1-410-798-5741).

Does NOWRA Have Liability Insurance for Exhibitors? NOWRA is not responsible for, and does not carry liability insurance for, the safety of your exhibit materials or equipment against theft, robbery, accidents, damage by fire or any other cause prior to, during, or subsequent to, the conference period. Valuables should be removed from all booths when not staffed. Please check with your insurance carrier regarding show coverage.

How Do I Reserve a Vendor Product Training Room? If you would like to reserve a Vendor Product Training Room, please complete the information on the Exposition Reservation Form and Contract. Costs are \$300 for 2 hours or less and \$500 for 4 hours.

How Do I Find Out About Sponsorship Opportunities? There are several sponsorship opportunities available, listed on the Reservation Form below. If you are interested in becoming a 3rd Annual Installer Academy Sponsor, please complete the information on the Exposition Reservation Form and Contract.

How Do I Reserve A Hotel Room? All Lodging Reservations are made directly with the Riviera Hotel & Casino by calling – 1-800-634-6753 or direct 702-794-9412. All Hotel Rooms are \$69.00 per night + taxes until November 19, 2007. After that date, rates increase. Please remember to ask for the National Onsite Wastewater Recycling Association (NOWRA) group rate. Hotel room **cancellations must be made 72 hours prior to arrival.** After this time, individuals will be charged for the first night of their reservation or forfeit their individual deposits.

EXHIBITOR INFORMATION

NOWRA'S THIRD ANNUAL INSTALLER ACADEMY TRADE SHOW

December 10-12, 2007 • The Riviera Hotel • Las Vegas, Nevada
EXPOSITION RESERVATION FORM AND CONTRACT

EXHIBITOR REGISTRATION

COMPANY NAME _____

CONTACT INFORMATION

Contact Name _____
Mailing Address _____
City _____ State ____ Zip/Postal Code _____
Phone _____ Fax _____

INFORMATION FOR PRINT

Contact Person _____
Address _____
City _____ State ____ Zip/Postal Code _____
Phone _____ Fax _____

BOOTH REQUEST #: _____

- Member Rate: \$1000/booth
- Non-Member Rate: \$1250/booth

See exposition booth layout on next page.
Every effort will be made to accommodate your placement request. **Priority booth assignments are given to NOWRA's Business Benefit Program Participants, sponsors, Company Donors and long-term advertisers.**

BOOTH PERSONNEL AT CONFERENCE

Attendee #1: Last Name, First Name, Name on badge _____

Attendee #2: Last Name, First Name, Name on badge _____

Additional Personnel: Last Name, First Name, Name on badge (\$175 add'l) _____

SPONSORSHIPS (Opportunities still available are in bold)

Event	Available	Contributed	Company Name
N/A Monday Breaks	\$0	\$1200	Concrete Sealants
<input type="checkbox"/> Monday Reception	\$5000		
<input type="checkbox"/> Tuesday Breakfast	\$1200		
N/A Tuesday Breaks	\$0	\$1200	Concrete Sealants
<input type="checkbox"/> Tuesday Pizza Lunch	\$3000		
<input type="checkbox"/> Roe-D-Hoe Awards Ceremony	\$6500		
N/A Roe-D-Hoe Grand Award	\$0	\$500	Lake Shore Burial Vault
N/A Roe-D-Hoe Grand Award	\$0	\$500	Northwest Cascade
N/A Roe-D-Hoe Grand Award	\$0	\$500	Stonebridge Environmental
<input type="checkbox"/> Equipment Donation (i.e. Control Panel, UV Package)			

Yes, I would like to be a 3rd Annual Installer Academy Sponsor. Please accept my sponsorship donation in the amount* of \$ _____ to be used for _____. (*Full or partial amounts accepted.)

AVAILABLE VENDOR PRODUCT TRAINING ROOM:

Yes, I would like to reserve a Vendor Product Training Room for: 2 hours or less (\$300) 4 hours (\$500)

AUTHORIZATION: I/we authorize NOWRA to reserve exhibit space for my/our use. I/we certify that the products to be displayed are used in the onsite industry. I/we acknowledge the payment and cancellations requirements contained in "Important Information."

SIGNATURE REQUIRED _____

Print Name _____

Title _____ Date _____

Member Number _____

New member (Membership enclosed – \$140)

PAYMENT INFORMATION: Registrations cannot be completed without full payment in U.S. Dollars. Please make checks payable to NOWRA

Enclosed is our check # _____ for \$ _____

Please charge my credit card \$ _____ Visa MasterCard

Credit Card Number _____

Expiration Date _____ Code _____

Name on Card _____

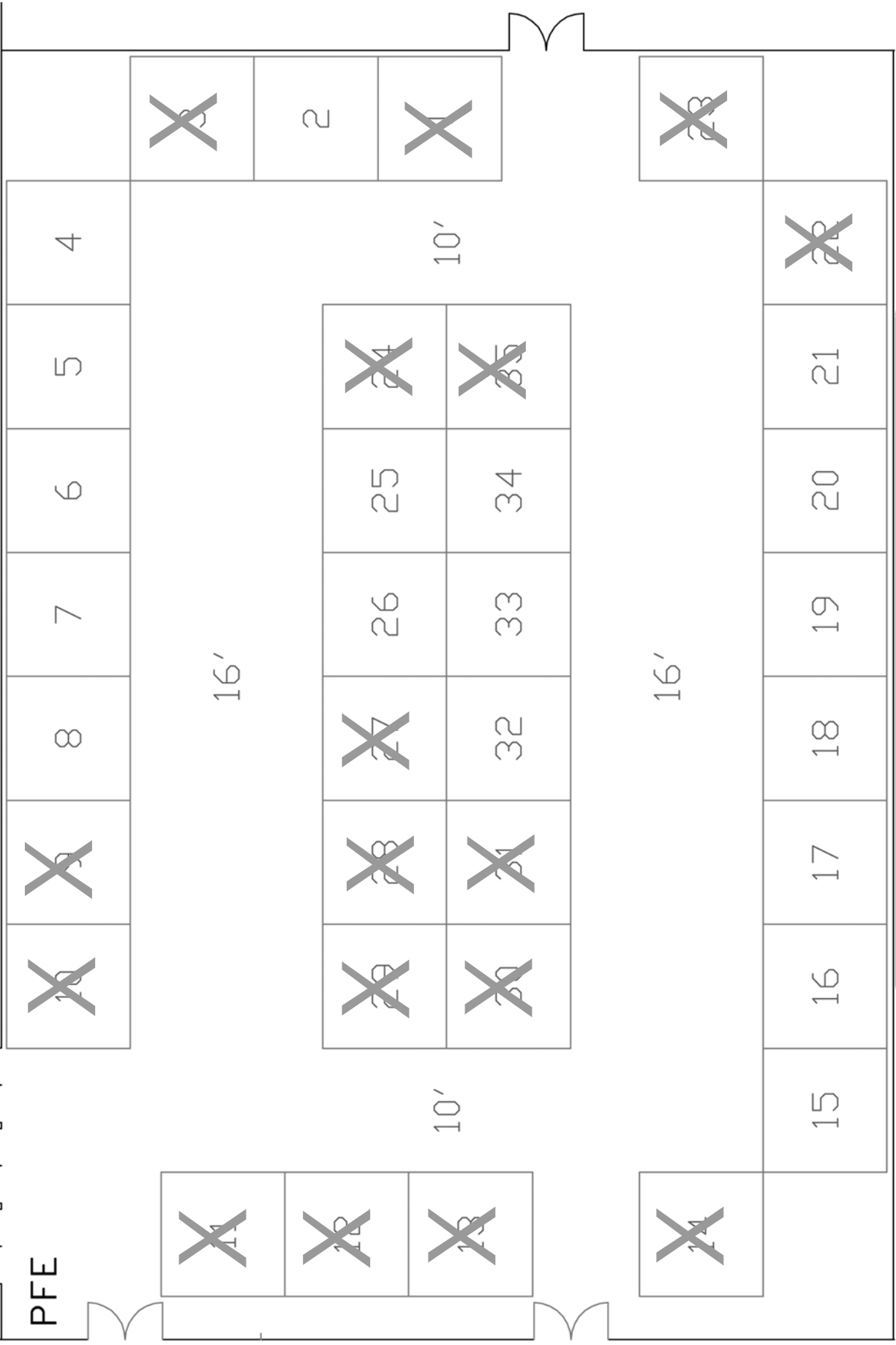
Billing Address _____

City _____ State _____ Zip _____

Signature (required) _____

Signed Registration Form with Payment in Full and mail to:
NOWRA Exposition Registration, P. O. Box 1270, Edgewater, MD 21037-7270
or FAX Credit Card Paid Forms to: 410-798-5741

PFE



NOWRA'S 3RD ANNUAL
INSTALLER ACADEMY
DECEMBER 10-12, 2007 • RIVIERA HOTEL, LAS VEGAS



08/17/2007

NOWRA'S THIRD ANNUAL INSTALLER ACADEMY

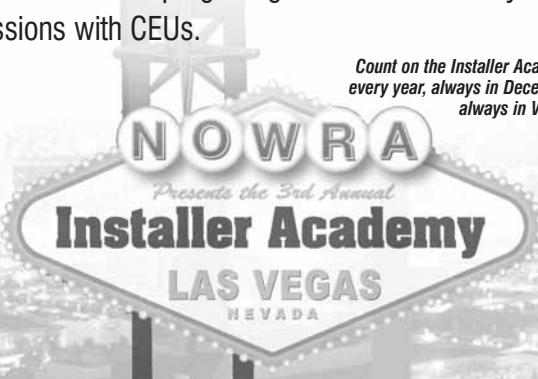


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NOWRA/WQA Joint Task Force on the Effect of Water Softeners on Decentralized Wastewater Systems

The NOWRA and Water Quality Association (WQA) joint task force is diligently seeking, through information exchange and investigation, an answer to the effects of water softeners on decentralized wastewater systems. These two associations, whose members are most linked with the water conditioning industry, co-sponsor workshops and symposia to wrestle with this important issue as part of each group's conferences.

The following is the NOWRA/WQA perspective and is written by Matt Byers (Onsite Manager for Zoeller Company and Chair of NOWRA's Technical Practices Committee) and Joseph Harrison (Water Quality Association).

NOWRA has been formally seeking to understand the influence of water softeners and water conditioners on septic systems. Arguments have been aired that softeners are innocuous, and conversely, that softeners are detrimental to septic systems. Data of varying qualities exist supporting both arguments. Since that is the case, the question remains. NOWRA and the Water Quality Association (WQA) agreed to partner to determine the effects, if any, from softeners on onsite systems.

To determine the influence of softeners and conditioners on onsite systems, a process is being used by NOWRA and WQA. The process being used is to first understand what is known about softeners and onsite systems and then to figure out how to gather data to yield answers for unanswered questions.

To that end, two symposia were held, one at NOWRA (Cleveland) and another at the Water Quality Association (WQA, Chicago). Data supporting either argument was solicited by Jim Converse (Professor Emeritus, University of Wisconsin). The symposium was held. Following that, WQA held an informative symposium featuring speakers from the onsite community informing their industry about onsite technology and the regulatory framework under which we work. This effort constituted a good beginning.

Following that, it was agreed that sites should be visited by onsite as well as water conditioning professionals so that both these professionals could teach each other about their respective equipment and industries, and thus create a useful synergy.

Dr. Bruce Lesikar (Texas A&M University and CIDWT) and D.J. Shanahan (Sharpwater Company, DE) piloted the creation of a survey instrument useful for site evaluations. This instrument was described to the public at NOWRA, Denver. Since then, it was adapted for use by Tom Konsler and Nancy Deal.

During July 11th to the 13th, 2007, Tom Konsler (Orange County Health Department, NC) and Nancy Deal (NCSU and CIDWT) hosted a pilot septic system site experience. They

developed a rather extensive protocol to evaluate the fitness of any septic tank system visited. An extensive sampling exercise was done that included source water as well as septic tank effluents and septic tank contents. The protocol was developed with input from many sources. Systems inspected included septic tanks and conventional systems, some with softeners and some without. The field experience was attended by onsite experts, a microbiologist, health department persons, and representatives from the WQA. In a nutshell, this pilot study yielded an opportunity to visit actual field sites with outside experts that truly contributed to our knowledge of the influent stream. Our field will continue to benefit as it increases its relationship with related industries such as the water conditioning and softening industry. This pilot study was designed to assist the authors in their development of a larger, deeper investigation defining how different influents may or may not affect any septic system. This is the kind of necessary work that will assist this field in defining these more difficult issues.

In summary, the 'softener' project is much larger than when begun. It is still controversial. Our goals remain the same. NOWRA and WQA intend to define the extent of influence softeners and conditioners have on onsite systems. We intend to work together and thus provide the consuming public solid answers to the remaining questions. We intend to create a professional synergy. We intend that our industries support each other. The softener group does have one good recommendation to the onsite community. And the onsite group has one good recommendation to the softener community. If you, as an onsite wastewater professional think a softener is causing a problem with an onsite system, contact a local water conditioning expert and seek advice about the device and its operation. If you, as a water conditioning expert have a question about an onsite systems, contact a local onsite expert. Just learning to ask the right questions, and asking the right people might save you a lot of time and effort. ■

NOWRA and WQA intend to create a professional synergy that will define the extent of influence softeners and conditioners have on onsite systems.

Water Softener Discharges DO Harm Septic Systems—And the Problem is Easy to Solve

This article was written by Mark Gross, Ph.D., Training Manager at Orenco Systems, Inc. Mark was formerly a professor of civil engineering at the University of Arkansas and has more than 20 years of experience in the decentralized wastewater field as a teacher, researcher, and designer.

Contrary to what some people say, water softener backwash poses a problem, not only to septic tanks and drain fields, but also to advanced treatment systems. When the water softener resin is backwashed two or three times a week, concentrated brine enters the wastewater stream as a slug of 38 to 112 gallons each backwash cycle. This causes two problems. One problem is that the septic tank discharges solids into the drain field, which can cause the soil to plug and the drain field to fail. Also, if there is a secondary treatment component, such as a media filter or ATU, it will perform abnormally. The simple solution to these problems is to route backwash brine directly into the drain field.

Although research on the effects of softener brine was performed at NSF and the University of Wisconsin, this research did not include septic tanks and did not reflect real-world conditions. The NSF study used complete-mix activated-sludge ATUs, *not* septic tanks. In studies with septic tanks, which are quiescent (not mixed), the high concentration of salt introduced by backwash brine causes stratification in the tank. The salt water dives to the bottom of the tank, and the fresh water rides across the surface of the brine layer. The heavy salt water can actually lift the sludge from the bottom of the tank, washing it

into the downstream components. Septic tanks that receive water softener brine have been observed to have no distinct layers of sludge, scum, and clear zone, as they should have in order to perform primary treatment.

The 1978 University of Wisconsin study, which dealt only with the soil dispersal component, *not* septic tanks, did *not* conclude whether or not water softener backwash brine is harmful to septic systems, and the study suggests—at least five times—that additional research is needed. Since that study, researchers have found evidence of both good and bad effects of water softener backwash brine upon soil dispersal systems. However, field observations of side-by-side dispersal systems in a shared mound showed that the trenches receiving the effluent with water softener brine formed a thick, gelatinous slime layer that clogged the infiltrative surface, while the trenches receiving no salt water discharge remained open with a normal microbial clogging layer.

Until conclusive research is performed, the evidence of observation and common sense must be trusted. Sodium concentrations over 3500 mg/L inhibit anaerobic digestion. Chloride concentrations over 180 mg/L also inhibit microbial growth. Over the course of history, all cultures have used salt as a preservative and disinfectant. It simply makes common sense that high concentrations of salt will inhibit the growth of microorganisms used for wastewater treatment. Observation supports this assumption: a field study of 18 wastewater treatment systems in Virginia clearly showed that nitrogen removal was inhibited in systems receiving water softener backwash brine. For these reasons, just as managers of municipal systems prohibit the discharge of salty wastes into their systems, most of the manufacturers of advanced wastewater treatment systems have clauses in their warranties voiding the warranty if water softener backwash brine is discharged to the treatment system. Homeowners who want to avoid this by rerouting the backwash brine away from the septic tank are often told that it would require cutting of concrete footings and floors at a cost of “thousands of dollars.” Yet, in the Virginia field study, five water softener backwash discharges were routed out of the wastewater system for less than \$100 per home using simple plumbing components. A pipe from the softener can lead directly to the distribution box or discharge basin. This simple, inexpensive measure prevents septic tank and treatment system failure and keeps the system warranty in effect.

Given the abundant evidence for the harmful effects of brine, and given how easy it is to keep these discharges out of septic systems, it makes sense for regulators to require water softeners to be installed in such a way that they pose no problems for wastewater treatment systems. ■

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There is No Substitute for Good Data!

This article was written by Richard J. Otis, PhD, PE, DEE, of Madison, Wisconsin. Dr. Otis is a member of the NOWRA Technical Practices Committee and a current Board member. These comments were reviewed and agreed to by Technical Practices Committee members.

The impact of water softeners on onsite treatment systems has been raised as an issue of concern since the 1960s. Studies and research has been performed off and on over the years to investigate the various concerns raised but the results have never been conclusive. Mark Gross raises this issue again in his article entitled “*Water Softener Discharges DO Harm Septic Systems—And the Problem Is Easy to Solve*” (see opposite page). This title makes a strong statement, which implies that conclusive evidence has been found to prove water softeners are detrimental to onsite treatment systems, but the article fails to produce the “abundant evidence,” which the author suggests exists, to confirm the “harmful effects of brine” to onsite system performance. I believe that before we inflict higher costs of systems on property owners and further lower the confidence of the public in onsite treatment system performance, we must ensure we have credible data to back up our concerns.

Let’s look more closely at the two “problems” that the discharge of the water softener regenerate brine causes with treatment and infiltration of the wastewater described in the article:

1. ***The septic tank discharges more suspended solids load to the drainfield, which can cause the drainfield to fail.*** The article begins by stating that: “When the water softener resin is backwashed two or three times a week, concentrated brine enters the wastewater stream as a slug of 38 to 112 gallons each backwash cycle.” These are unusually high numbers from my experience. A typical residential automatic water softener discharges about 40 gallons per regeneration cycle, or about what a top loading clothes washer discharges per load of wash. Even if the softener regenerated as much as 3 times a week(!), a septic tank should be able to handle the equivalent of one additional clothes washing load, which typically occurs early in the morning when no other water fixtures are being used. If the observed tanks were not able to handle the loads, maybe they were sized too small. But, do average home owners really set their water softeners to regenerate 3 times per week? If they do and if their water softeners actually discharge 112 gallons per cycle, then there is legitimate cause for concern. For an average household, three 112 gallon cycles per week would account for approximately 25% of the total household wastewater discharge! A University of Wisconsin study of rural Wisconsin homes found that water softener discharges accounted for only 6.2% of the total daily flow.

The article goes on to describe how the slug of regenerate brine “dives” to the bottom of the tank where it “can actually lift the sludge from the bottom”. It claims that no stratification of sludge, scum, and “clear zone” occurs. How was this observed? In how many systems was it seen? How did

it impact performance? It implies that the discharge of suspended solids is increased but actual data is not provided. In a recent study conducted by the Ontario Rural Wastewater Centre at the University of Guelph, 38 residential septic tanks of which 17 received spent water softener brine were sampled, no significant differences were found between tanks receiving spent brine and tanks that did not receive spent brine with respect to cBOD₅, TSS, VSS, total coliform and sludge and scum accumulation rates. (Kinsley, et al., 2005). The tanks receiving the brine did have significantly higher sodium and chloride concentrations, however. Further, 7 of the 38 systems evaluated were hydraulically failing but none of these systems received regenerate brine.

Finally, a field study consisting of two side-by-side dispersal systems in a shared mound is described in which one side received septic tank effluent with softener brine while the other received only septic tank effluent. It was observed that the side receiving the septic tank effluent with the brine had formed a thick gelatinous slime layer on the soil infiltrative surface, which had clogged the system. The other side remained open with a “normal microbial layer”. Was the mound shared between two households that had different dietary and water use habits? Was the slime layer the result of increased suspended solids loading due to the brine discharge? Were the daily wastewater volumes greater for the household with the water softener? There is no way to tell. No experimental methods or data are presented. This is a purely anecdotal piece of evidence at best.

2. ***Secondary treatment components, such as media filters or ATUs, will perform abnormally.*** The article states in a matter of fact manner that sodium concentrations over 3500 mg/L inhibit anaerobic digestion and chloride concentrations over 180 mg/L inhibit microbial growth. As a general statement for non-acclimatized microbial populations, it is not as simple as presented (Bashir and Matin, 2001; Corey et al., 1977; Panswad and Ana, 1999). Sodium concentrations between 3500 and 5000 mg/L are moderately inhibit anaerobic activity and become highly inhibitory at 8000 mg/L but septic tank effluent concentrations higher than 200 mg/L are seldom reported (WERF, 2006). Chloride concentrations can reach more than 2000 mg/L but most data show the chloride concentrations to less than 500 mg/L. Despite the fact that concentrations can be high, the literature does not suggest there is a problem with treatment performance. This does not mean it doesn’t occur, it may only mean that few studies have been conducted. The article does mention a field study of 18 treatment systems in Virginia, which “clearly showed” that nitrogen removal was inhibited in

continued on page 32

By Tim Taylor, R.S.

(Former TOWA President and current NOWRA Board Member)

When most Americans, or for that matter people from around the globe, think of Texas they envision a vast arid land full of sticky things such as cactus and mesquite trees. Soils are generally believed to be a sand desert and the topography is thought to be flat with no hills or mountains. Nothing could be further from the truth, although many far West Texans, who have not traveled much, are amazed when they visit East Texas and encounter vast areas of thick pine and hardwood trees. They are even more surprised, when in East Texas in the summer months, to find everything green and lush.

This environment is a stark contrast from far West Texas. El Paso for instance, is full of desert like sandy soils and lots of sticky things, many of which bite or sting. The main difference between these two extremes is the amount of annual rainfall they receive and the soils present. East Texas soils range from sandy to heavy pottery type clays where West Texas soils are mostly sand. West Texas receives traditionally receives under 10 inches of rain annually while East Texas gets 60 plus inches per year.

Generally, even we East Texans, think of Texas as being in a drought condition from May thru October but not in 2007. As most of us have seen on the nightly news, most of the State

There is No Substitute for Good Data! *(continued from page 32)*

systems receiving water softener brine. However, nothing is said about how the study was designed and what procedures were used. Without knowing how the study was conducted, the data are nothing more than anecdotal.

Proposed Solutions to the "Problem"

The solution proposed in the article for the water softener "problem" is to bypass any pretreatment and discharge the brine directly to the drainfield. What impacts will undiluted brine have on the soil or on the groundwater? Will we create a real problem out of a "problem" that may only be perceived?

I am not suggesting that water softeners do not impact onsite system performance. We don't seem to have relevant, credible and sufficient data to rule it out. However, I suspect that where water softeners are used appropriately, any impacts are insignificant. Thousands of systems have been receiving water softener regenerate brine for many years without a correlation drawn between water softener discharges and hydraulic failures.

Concluding Points

The onsite treatment industry needs to be careful in how we react to reported data, both positive and negative, before jumping ahead to conclusions and cost adding solutions. And barring confirmation of our suspicions, we should be careful about the common sense argument that if nothing else, "It's the right thing to do!" Home owners who rely on onsite treatment systems for wastewater treatment are already cautioned about installing some common plumbing appliances that we all have come to expect in home to increase our quality of living and also how they should use others fixtures, which they can't live without, to avoid stressing their treatment systems to the point of failure. As a result of these warnings, rural home owners often feel deprived and are fearful of experiencing a quality of living that home owners connected to municipal sewers enjoy.

If excessive use of softener use is real and commonplace, I believe our response first should be better public education to cause a change in behavior rather than a change in system design. Is it really necessary to soften all the water used in the home? Why not limit it to hot water? For cold water clothes washing, liquid detergents perform satisfactorily in hard water. Also, on-demand water softeners are now available to eliminate excessive regeneration. Is the public aware of these improvements?

The article does offer a low cost potential solution to the presumed problem, which is commendable. Our industry should be offering safe and effective system designs to accommodate the type of households and living habits that homeowners desire. However, please, let's be sure we can support our positions with hard data before we compel others to follow our lead. ■

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of Texas has had an extremely heavy rainfall starting in April, And even as this article is being prepared, heavy rains are continuing throughout many parts of the State.

Rainfall records have been set in many parts of Texas with Central Texas and coastal areas, such as Houston and Beaumont, having the highest levels. Lakes and stock ponds all over the State are overflowing. Lake Waco, for instance, has been shut down, to all recreational activities, until at least September. I grew up in Waco and cannot remember this ever happening before.

Well that ends your history and geography lesson. The real topic of this article is how does all this rain affect onsite systems?

One major impact to homeowners with septic systems is that they may have to spend time in a motel or stay with friends or relatives. When areas with heavy clay soils and conventional gravity leech fields become saturated, toilets quit flushing, showers don't drain and washing machine drain lines back up.

There are several reasons these situations could occur, such as septic tanks not being properly sealed and taking on water (please see Colin Bishop's excellent article "How to Test & Assure Watertight Tanks" at <http://www.myteha.org/Presentations.htm>). Soils in the drainfields become so saturated with surface and groundwater that there is no room for wastewater, and simple head pressure being exerted from standing water.

Another issue is that homeowners' water wells may also be contaminated with flood waters if the septic tank is not properly sealed or made of products that are "watertight." Electrical components, such as breaker boxes and pressure switches, for both onsite systems and water wells are all above ground and are vulnerable to flood waters and malfunctions.

Even owners of advanced treatment systems, such as aerobics, peat, drip irrigation, pressure dosing and mounds, encounter similar problems with heavy rainfalls. These systems also have tanks that are subject to flooding and electrical components that could short out if covered with water. These systems are installed with electrical and mechanical components above the 100 year flood zone but this years rainfall has resulted in forming new maps for the 100 year flood zone in many areas.

As the factory rep for Consolidated Treatment Systems, Inc., many of my customers involved in installing, pumping, and servicing all types of onsite systems are encountering a variety of problems from replacing aerators to pumping tanks. They range from David Wolf's home in far East Texas, to the DFW area where Rick Ashley is busy, and south to the Houston area where Tim Snyder is renting lots of porta potties. Even areas like San Antonio where Bret Brown installs and pumps, and West Texas, San Angelo, where Ray Stubblefield works have been too wet to work and tanks are being pumped to give owners some relief.

Central Texas from Austin north to Killen and Waco have been some of the hardest hit areas with reports from Jerry McClung (Temple) and Rick Waldrop (Marble Falls) of floating pump tanks, some of which were anchored down when installed. Even systems where the effluent is pumped to the disposal fields, as drip systems, pressure dosing systems, spray irrigation, elevated drainfields and mound systems, are adversely affected. Some of the problems with these systems are pump failures due to pumping mud which has infiltrated into pump tanks, electrical components shorting out and even in a perfect installation, if there is no electricity available the pumps will not operate.

With pumped systems, owners should not continue to discharge effluent if the tanks are inundated as this will bring substandard water, which will run off the property, to the surface. If continuous heavy rainfall and flooding are in the forecast homeowners should get prepared with the following actions.

- Minimize water use
- Call service personnel to remove components that may be subject to flooding
- Rent a "porta potty"
- Make arrangements to stay with friends until the flooding is over.

Before resuming normal activities, have their systems checked out by qualified service companies.

For service provides, the following actions are advised.

New installations or replacement work should be postponed until the ground dries out but in some cases emergency work must be done right away. As Doug Hensarling (TOWA's Treasurer) has commented he has "floaties" on his backhoe. This precaution is critical particularly with conventional drainfields or any subsurface system in clay soils. If installation of subsurface systems in tight soils is attempted, the side walls of the ditches will smear and seal off, not allowing wastewater to be absorbed and distributed properly. Also, the owner's yard will be destroyed from using heavy equipment on saturated ground.

In Houston where the topography is very flat, installers like Mid Smith have been unable to install systems for a couple of months. These level areas stay saturated for long periods after the flooding waters soak into the ground.

These are just some of the major issues reported that Texans are experiencing, but fortunately Texas homeowners have a great number of very experienced and highly professional onsite personnel to help them deal with these problems. Texans, as well as other state owners, can go to either their state's website or NOWRA SepticLocator (www.septiclocator.com) to find a qualified and trained service provider in their area to help them with these problems.

In the meantime, we'll keep folks up to date on our website—and next year we'll probably be griping about the lack of rain. But for now we sure are praying for a dry spell. ■

ARIZONA

The Arizona Onsite Wastewater Recycling Association successfully concluded its first conference July 20–21, 2007. This group has been working hard for the past two years with a Board on structure reorganization and developing the framework for an active education and training program. The conference was held at the beautiful Northern Arizona University's (NAU) campus in Flagstaff, with 80° temperatures. Thirty companies supported the association's work with their exhibits, together with the more than 90 participants attending the education and training program.

One of the most interesting exhibits at the Arizona conference was a program entitled "Engineers without Borders" (EWB) located at NAU. EWB is an international organization representing college and university engineering students involved in water and wastewater programs. The NAU group was leaving for a 16-day journey to Ghana to identify water and wastewater issues there.

DELAWARE

The Association just finished exhibiting at the State's Annual Fair to promote and educate the community on the on-site industry. They are also gearing up for their Annual October Conference, scheduled to occur at the Delaware Fair Grounds on October 23–24. This year's theme is *On-site Wastewater, the Ever Changing Industry*. Currently they have 21 presenters confirmed and 25 exhibitors. President Hilary Moore states that the group is also working on 2 partnership meetings with state and county officials regarding the development of large system regulations/ordinances, and a class H system inspector guidance document. In August they will conduct a real estate education seminar for Exit Realty.

MARYLAND

The Association has a schedule of education and training courses now underway that includes O&M, Inspector and Onsite A to Z. Courses this fall will also include a conference and trade show. MOWPA members will also participate in the August Maryland County Officials Conference with a booth presenting onsite systems in the state.

They will also take advantage of the timing of this event to present State officials with a proposal to change state regulations to require practitioner education and training that is tied to county licenses. This proposed approach was recently pre-

sent to the State's health directors and received their support. Following the success of their March efforts, the group is also developing new strategies to defeat actions to cut the funding for septic upgrades and replacements in the Bay Restoration Program.

VIRGINIA

Bob Lee, VOWRA President, reports that the Association just signed a contract for a new Executive Director, with Benny Morrell, whose official duties begin August 1. VOWRA is planning its Fall Annual Conference, scheduled to occur November 11–14, on the VA Tech Campus at the Skelton Center. This year's theme is *New Rules, New Opportunities and New Partnerships: Exploring the Changing Roles of Onsite Wastewater Treatment Systems*. The Association is also conducting an Onsite A to Z course in September at Virginia Beach and has initiated its "Registered Installer Program." A MOA is nearly ready to be signed with Southside Virginia Community College to jointly sponsor training at their onsite training center and other sites across the state. VOWRA has sponsored a state management system and a collaborative spring conference with Virginia Department of Health. In addition, 3 VOWRA members have been appointed to represent the industry on the state water and wastewater operators licensing board. At this time, they have increased their membership to over 300.

WASHINGTON

John Thomas, WOSSA Executive Director, reported on WOSSA members' involvement in the State's proposed changes to design criteria and standards. Activities for the rewrite of training center resources are progressing. With support of the WOSSA Board, the group is also hard at work remodeling the training center with interior improvements that include new wall board, lighting, and workstations for technical training, in addition to reworking the onsite display. The training schedule for the WOSSA fall and winter sessions is now posted on the WOSSA website.

WISCONSIN

Ann Gryphan, WOWRA association manager, said that the state is working on a code rewrite that includes timelines for counties to implement septic system maintenance tracking programs and time of real estate transfer inspections. The state's goal is to have all of these requirements in effect within

5 years. In addition, Association members have developed 2-day courses for private onsite septic system evaluations. They have also learned that the state is in the process of proposing major budget cuts in the septic system replacement grant program in the amount of \$3 million a year; and WOWRA is now mobilizing people to oppose this action.

YANKEE

(Includes the states of Connecticut, New Hampshire, Massachusetts, Rhode Island, Vermont & Maine). Tom Groves (YOWA Interim Vice President) states that the Association (now into its first full year of activities) is just beginning to formulate its official education and training program. In starting the program, the state of VT is targeted as one of the first areas to receive attention. Vermont has recently legislated a requirement for a system designer to have 12 training hours. Association leaders are also looking at this program as an opportunity to build membership in Vermont. They want to conduct their education program using volunteers, and considered beginning with the Onsite A-Z, but decided to use URI instead. The program will be held on September 13, 2007. Trainers are from the Rhode Island training center, who will be compensated with travel and staff costs. In March 2008, the Association will sponsor the 3rd Northeast Onsite education short course in Mystic, Connecticut, that will also include a trade show. ■



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- 17-18 **MD Onsite Wastewater Professionals Assoc.** Operations & Maintenance of Onsite Systems, Contact: 410-798-0842

OCTOBER 2007

- 10 **Model Code Regulator Workshop**, 4th Annual Joint Conference on Health, Yakima Convention Center, Washington, Contact: 1-800-966-2942
- 20-24 **American Society of Agricultural and Biological Engineers.** 11th National Symposium on Individual and Small Comm. Sewage Systems Warwick RI. Contact: 269-428-6333 or www.asabe.org
- 23-24 **Delaware Onsite Wastewater Recycling Association.** 11th Annual Technical Conference and Exposition, Delaware State Fairgrounds, Harrington, DE. Contact: 302-739-9948 or www.dowra.org

NOVEMBER 2007

- 6-7 **Texas Onsite Wastewater Association, TOWA** Superconference, Ft. Worth Stockyards, Fort Worth, TX Contact: www.txowa.org

- 11-14 **Virginia Onsite Wastewater Recycling Association**, VA Tech Campus at the Skelton Center. Theme: New Rules, New Opportunities and New Partnerships: Exploring The Changing Roles of Onsite Wastewater Treatment Systems. Contact: www.nowra.org/vowra

DECEMBER 2007

- 10-12 **NOWRA 3rd Annual Installer Academy.** Riviera Hotel, Las Vegas, NV. Contact: (800) 966-2942 or www.nowra.org

JANUARY 2008

- 7-8 **Wisconsin Precast Concrete Association.** 2008 Winter Convention, Holiday Inn & Suites, Madison, WI Contact: (608) 256-7701
- 15-17 **Ohio Onsite Wastewater Association.** 2008 Annual Conference and Trade Show, Columbus, OH. Contact: 866-843-4429 or visit www.ohioonsite.org
- 21 **Missouri Smallflows Organization.** Pre-Conference Seminar Columbia, MO Contact: 417-739-4100 or visit www.mosmallflows.org
- 22-23 **Missouri Smallflows Organization.** 12th Annual Conference & Exhibition, Holiday Inn Expo Center, Columbia, MO, Contact: 417-739-4100 or visit www.mosmallflows.org
- 25-26 **Washington On-Site Sewage Association.** 2008 12th Annual Conference; Vancouver Hilton, Vancouver, WA. Contact: 253-297-2837 www.wossa.org

FEBRUARY 2008

- 15-16 **Wisconsin Onsite Wastewater Recycling Association.** 2008 Convention, Country Springs Hotel, Waukesha, WI. Contact: (608) 256-7757 or www.wowra.com

MARCH 2008

- 11-13 **Northeast Onsite Short Course** sponsored by YOWA. Marriott Hotel and Spa, Groton, CT. Contact: 978-323-7929 or www.neiwpc.org

APRIL 5-9, 2008

NOWRA
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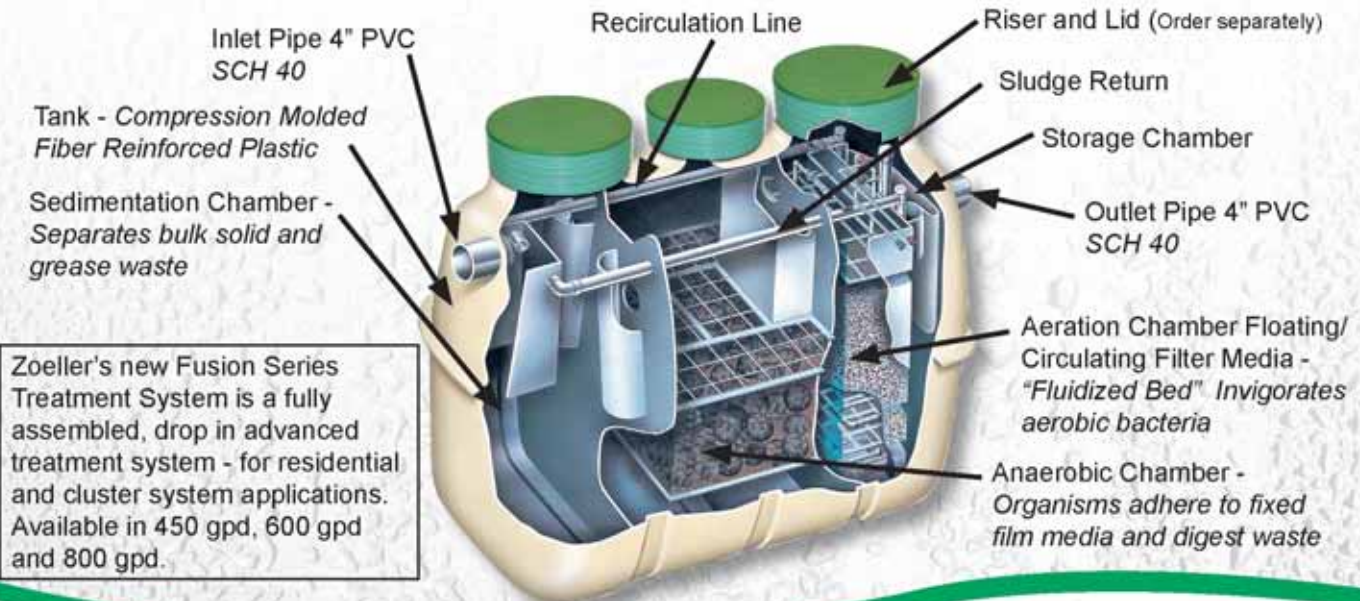


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