

THE MICHIGAN INSIGHT

A PERIODIC PUBLICATION OF THE MICHIGAN ONSITE WASTEWATER RECYCLING ASSOCIATION MOWRA

MOWKA

From the President . . .

Training...Training...Training How can we bring the professionals up to speed in the onsite market? Installers, Designers, Inspectors, Suppliers, Maintenance and Trainers. From the standard gravity field to the new treatment systems in the field are having problems because of personnel in the field are not properly trained. The training center just did a pump evaluation session for the evaluator. The variety of experience was wide ranged. From a new fellow that was just getting started to an engineer that had been in the business for years. We are hoping that the new state wide code will address some of the training and certification requirements.

MOWRA elections are coming in October so if you have not held an office now is the time get involved!

Ask a fellow peer to join MOWRA! It is unbelievable how much one can learn from the NOWRA, MOWRA newsletter and talking with other members at our meetings.

Bill Gregory

2004 Officers

President: Bill Gregory President-Elect: Dan Milan Vice President: Bruce Gruner Secretary-Treasurer: Mike Stephens

From the Editor . . .

Inside INSIGHT SPRING 2004

A few more days of spring and we will move into summer. This Spring, Michigan businesses I talk to report diverse conditions in a range from slow to very busy – all dependent on who, what, where and the weather. All these factors aside, MOWRA has been very busy working for our industry.

Larry Stephens, Dan Milan, Chuck Cousino and Ted Loudon have represented MOWRA on a task force studying the Statewide Code for On-site Sewage Wastewater. We all owe a big "Thanks" to them for dedicating their time to this important work. Only a few months ago a Statewide Code for our industry seemed to be many years away – now, could this actually happen in 2004?

MOWRA Members have already been meeting to plan the 2005 Onsite Wastewater Conference. The 2004 Conference review is in this issue.

As you see in Bill Gregory's regular President's column that the election of MOWRA Officers will be with us soon. Please take note and get involved. Take Bill's advice that New Member Recruiting makes our association stronger. Membership will be vital to our association when a statewide code happens; because, MOWRA will need tons of help to fulfill the mission of "Training...Training...Training".

I have placed a web site directory of our advertiser's sites as well as association and reference sites. If you want this to be a regular feature, let me know. Also does anyone have any favorite onsite wastewater sites that are useful? Please send them to me (rziegel@qcnet.net)

We always are looking for writers and advertisers. Send us Industry News, Tips, Alternative System Success Stories, Legislative issues and Opinions - All articles will be considered for publication. Please send your articles and pictures or ad inquiries to either:

Bonnie Recker bonnie@contourengineering.com Rod Ziegel rziegel@qcnet.net 734-604-4829

In the Summer 2004 Insight we will publish Ted Loudon's article about the 1st International Conference on Onsite Wastewater Treatment and Recycling that was held in Perth, Australia, February 11-14, 2004. The deadline for articles for the summer, 2004 Insight will be June 30, 2004.

Rod Ziegel, Editor



New Members

Welcome Members!

Please welcome the following individuals who have joined or rejoined MOWRA this year.

Kerry Atherton

Orenco Systems Incorporated Sutherlin, Oregon

Michael Bernhardt

Boss Engineering Co. Howell, Michigan

Mike Carpenter

Rowe Incorporated Lapeer, Michigan

David Endreszl

Endreszl Assoc. Engineering Inc. Clarkston, Michigan

Richard Hofsess

Zeimet Wozaniak Associates Southfield, Michigan

James Kovitz

J S K Enterprises LLC Brighton, Michigan

James Laughbaum

Upper Peninsula Rubber Co., Inc. Escanaba, Michigan

Eric Pessell

Jackson County Health Department Jackson, Michigan

Greg Prose

Greg Prose Excavating Davisburg, Michigan

Richard Raetz

Global Remediation Technologies, Inc. Traverse City, Michigan

Gregg Stoll

Superior Resource Solutions Manistique, Michigan

A Statewide Sanitary Code for Michigan?

Many eyebrows were raised and a murmur ran through the crowd at the 53rd Annual Michigan Wastewater Conference this past January. During the lunch program, Richard Sacks, the DEQ Environmental Health Section Chief, stated that Governor Granholm would be mentioning working toward a statewide sanitary code for Michigan in her State of the State Address. Although this topic was not mentioned in the Address, the Governor is clearly addressing the issue.

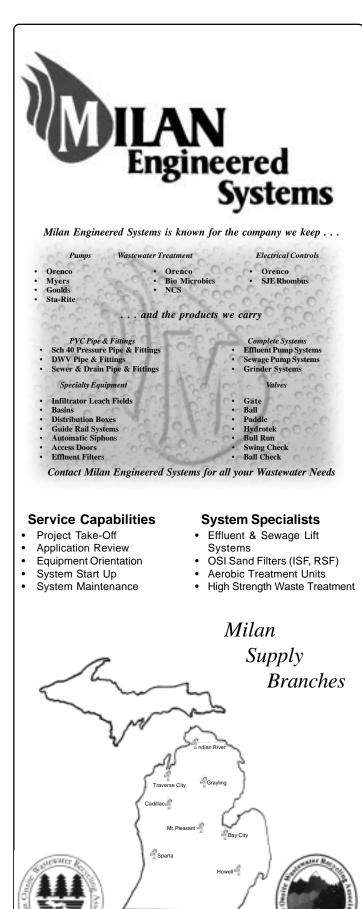
On January 20, 2004, Governor Granholm wrote her "first Special Message to the Legislature, out of a sense of urgency to protect a key element of Michigan's legacy – our water." In this letter, the Governor has "asked the DEQ to work with appropriate constituencies on this and to draft and deliver a suggested sanitary code" to the Legislature within 90 days.

Many may be aware that NOWRA has been developing a Model Performance Code for use by governmental agencies in their development or revision of a sanitary code. This Model Performance Code focuses first on a performance standard and a treatment quality, then offers design or site criteria as a basis to meet those standards. This Code is quite comprehensive, and is hoped to be released in draft form by the NOWRA 13th Annual Technical Education Conference and Exposition in Albuquerque in November of this year.

MOWRA is also lending its support toward sanitary code efforts. At our Annual Business Meeting, the membership voted to send \$2,000 to the Model Performance Code Fund. The Association has also been invited to the "appropriate constituencies" group that is working on the Michigan state code. Dan Milan, of Milan Engineered Systems, has been appointed to this group. The first meeting was held on March 2, 2004.

The development of a state code significantly affects all of us in the industry, so the involvement and input of our membership is critical in the draft and development stages of this work. The officers of the Association would like to hear your input on these matters.

Mike Stephens



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Training Center	2004 Schedule
Programs	
Conducted at the	
Michigan Onsite Wastewater Training and Education Center (MOWTEC)	 August 24 & 25 A course specifically designed for those who need basic training in modern onsite wastewater treatment concepts. It will be beneficial to regulators, contractors and designers alike. EXISTING SYSTEMS EVALUATOR TRAINING August 18 & 19 October 27 & 28 A two-day session for evaluators or those interested in becoming
	evaluators of existing septic systems.
Located at MSU Tollgate Center (Corner of Meadowbrook & Twelve Mile Road) Novi, Michigan For more information please contact:	 SOILS TRAINING October 13 & 20 A two-day field oriented, soils training program for those with minimal experience in soils as it relates to onsite sewage disposal.
Michigan State University	DESIGN OF ONSITE AND DECENTRALIZED WASTEWATER SYSTEMS I October 6 & 7
Barb Delong 🕿 517.355.4720 delong24@msu.edu	A basic two-day course to provide background information for designers who are involved in or wish to become involved in design of innovative/ alternative designs for onsite and decentralized wastewater treatment systems.
www.egr.msu.edu/age/	ONSITE WASTEWATER SYSTEMS MAINTENANCE
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A Uniform State Code for Septic Systems in Michigan?

—Ted L. Loudon

Michigan Governor Jennifer Granholm issued a Special Letter to the Legislature in which she called for the development of a state sanitary code to provide uniformity of regulations throughout the state and to establish a program of regular inspection of septic systems and other onsite wastewater treatment facilities. Some jurisdictions in the state have already developed a requirement that septic systems be evaluated each time a property transaction occurs but that is not a uniform practice. It has long been recognized that septic systems are often neglected by homeowners until they experience a problem. The regulatory structure has been such that small systems, which treat flows less than 1,000 gallons a day, are regulated by the local health department using locally developed codes. In many locations local health departments administer state rates for flows up to 10,000 gpd. Michigan is the only state that does not have a statewide code to provide an overall regulatory program for onsite sewage treatment and disposal. It appears that will be changing in the near future.

The technology for providing good treatment of wastewater on site, even in areas where the soils are considered inadequate, is rapidly advancing. Development of a program that will allow the state to evaluate and accept or reject new technology, thus providing more uniformity statewide, is needed.

Both research and experience in other states have shown that where regular inspections of onsite wastewater treatment systems are done, failures such as sewage coming to the surface or backing up into a dwelling are averted. Regular inspection and maintenance as required can result in systems working well for a long period of time. Septic systems function amazingly well under total neglect-but that doesn't mean that neglect constitutes an adequate program. Convincing homeowners that they need to subscribe to and pay for regular evaluation and maintenance of their systems will be a hard sell. People are accustomed to having a system that is out of sight, out of mind and "free" until catastrophic failure comes. It is anticipated that a new code will provide for use of improved technologies and regular monitoring, maintenance, and evaluation of system performance to assure that systems are properly operating within the environmental constraints of a particular site.

It is hoped that the state will widely seek input in the development of a statewide program and that a program that is both environmentally sound and acceptable to system owners can be developed. Much educational programming will be needed to help homeowners accept the need for regular maintenance. MSUE has a good bulletin (WQ-39) in the form of a recordskeeping folder for use in homeowner education programs. Please contact me if you would like help with educational meetings related to onsite and small community wastewater systems.



MOWRA BOOTH "ON THE ROAD"

~ Bill Gregory

The MOWRA booth has been showing up around the state. It was at the Onsite Show at MSU Kellogg Center in January. From there it was at the Michigan Ground Water Show in Lansing at the Lansing Center. Grand Rapids was the next stop at the MEHA show at the Crown Plaza. Not a bad start for the first 3 months of the year. It draws the attention of the show attendees with the lights, neat crisp design, training center information and pictures of the Mother House Meeting. Thanks to Mike & Larry Stephens and all of the others that put it together and helping us to promote the Michigan Onsite Wastewater Recycling Association.

Statewide Sanitary Code for On-site Wastewater Systems

—Dan Milan

One motivational (financial) reason and justification for a statewide sanitary code...

Coastal Zone Management Act in 1990 encouraged coastal states to develop programs specifically addressing coastal nonpoint source pollution and seek federal approval of the programs from the National Oceanic and Atmospheric Administration and the EPA. Michigan must meet specific requirements to receive federal funding and to avoid programs sanctions. Michigan's Section 6217 Program does not have full federal approval, which means there are outstanding conditions, such as management measures, that we have not met.

One of the biggest hurdles is the lack of a statewide sanitary code addressing septic tanks and other on-site disposal systems. If the program was fully approved, an additional \$275,000 per year would be available in funding. The Governor has directed MDEQ to work on a statewide code.

The MDEQ has invited stake holders to sit on a task force to share information and discuss related subjects. A "white paper will be developed and generate further discussions...

Please review the following information, visit the MDEQ website for any clarification, and feel free to contact MOWRA.

Statewide Code for On-site Sewage Wastewater Treatment Taskforce Update #1

Generously shared by:	Larry Stephens,
	Stephens Consulting Services
Originally submitted to:	Michigan Association of Realtors,
	April 7, 2004.
Meetings:	March 16, 2004 & March 30, 2004.

ISSUES BEING DISCUSSED

- 1. Legislative issues
 - a. One piece of legislation versus several small pieces
 - b. Details in legislation, or enabling statute with rules to follow
 - c. Funding of costs for implementation

Much discussion on these topics, but no clear direction. DEQ is to eventually put together a "White Paper" on the issues and recommendations of the Task group.

- 2. Licensing/certification of practitioners education and continuing education
 - a. Contractors
 - b. Designers
 - c. Regulators
 - d. Inspectors
 - e. Maintenance providers

The group appears to be in favor of better education and standards of practice with regard to those doing work in the industry, including forms of quality control like licensing or certification of practitioners.

3. Regulatory structure and range of authority

This relates to the regulatory structure for implementation of a statewide code. Not a lot has been discussed on this issue yet, but it appears certain that at least minimum requirements will be set at the state level, and the local health departments will carry the load on enforcement and implementation. Many of us in private practice feel strongly that standards should be set at the state level that can be applied anywhere in the state, and that allowing local units of government to add to or modify those standards will be problematic. Local health departments do not have the resources to deal with the complex issues of today's technology. It is important to have uniformity throughout the state, and decisions based upon good science, biology and engineering without the influence of local politics, as much as possible. This can only be done if decisions are made by a central trust of knowledge at the state level.

4. Minimum site suitability and design standards

Again, not much time has yet been spent discussing this large set of issues. The subject somewhat overlaps with the topics of item #3 above. Those of us working in this field would like to see the development of a "performance-based" code. While hard to develop and describe in a few words, it is usually spoken of as the opposite of a "prescriptive code". Let me try to briefly describe the difference.

In a prescriptive code one would find a list of minimums like tank sizes for different size homes, minimum drain field sizes and configurations for different home sizes, specific recipes for system designs, etc. A performance-based code would specify what the end result (system performance) is required to be in any given situation. The system designer is then responsible for coming up with a design that will provide that result, the installer must properly install the system, and some management entity is responsible for system oversight so that it continues to perform as designed. In the practical world, this process might go something like this:

- **5.** A trained practitioner (designer, site evaluator, regulator) does a site and soil assessment to identify the site characteristics, risk factors, and environmental sensitivity of the site.
- 6. From the site assessment, performance standards are set.
- 7. A trained designer designs a system that will meet the performance standards for that individual site.
- **8.** A trained contractor installs the system in accordance with the design.
- **9.** Construction is inspected to be sure the installation follows plans.
- **10.** Oversight of the operation and management of the system is provided to assure it always operates as originally intended.

As you might expect, this process should be flexible enough to not be cumbersome for sites with low risk factors and little environmental sensitivity, and get gradually more careful and somewhat more complex for the difficult sites.

11. Management of operating systems

The last meeting, as well as some of the previous meeting, was primarily devoted to this topic. And this is where the subject of system inspections, including "time-of-sale" inspections, came

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up. Michigan currently has an estimated 1.2 million onsite systems, and permits are issued for 20,000 to 25,000 new systems every year. By some estimates, 50% of all new homes have onsite systems. The sheer magnitude of periodic inspections of all onsite systems is an overwhelming thought. The Task group spent a lot of time trying to get some sort of consensus at the last meeting, but none was reached.

There is a definite need and widespread support for some form of program for periodic inspections for those systems utilizing alternative designs and technologies. The numbers of such systems, while growing every day, is still low enough to not seem insurmountable.

12. Financial

This appears to be a very sensitive issue in the current legislative climate. However, I get the feeling that most agree that the program will need to be supported through user fees in various forms. Not much detail has yet been discussed.

13. Land use issues

Not much discussion on this issue yet. My feeling is that better development of our wastewater infrastructure in the future will do as much to prevent urban sprawl, as it will do to feed it. Properly managed wastewater systems do have the potential to allow us to house our future population on less and less land, thus providing the tool to preserve valuable farm land and open space.

> Statewide Code for On-site Sewage Wastewater Treatment Taskforce Update #2 Meeting: April 13, 2004

> > MOWRA Update April 29, 2004 Meeting Summary

Initial discussions were directed to the topic of administrative rules versus statute in defining the specific technical issues that would be preferable in order to provide flexibility in dealing effectively with technical issues. From a political standpoint it will be critical to clearly define in statute the fundamental principle needs and goals of the code, for protecting public health and the environment, and to establish the limits of necessary rule making authority. Also suggested, that we provide performance-based enabling legislation with technical requirements defined in administrative rules.

Extensive discussion continued on the issue of regulatory structure. With respect to alternative systems, there needs to be direction and a regulatory structure, including a process for review and approval of alternative technologies and products, and technical assistance and management after construction.

While there may be regulation and oversight at the state level, it was also the general conclusion that we must continue to rely on local health departments (LDHs) for regulatory oversight at the local level. Standards at the state level should be minimums with provisions that would allow for more stringent standards at the local level. It was requested that the minimum program requirements for on-site sewage be provided to the task force.

Our meeting concluded with initial discussion of the regulatory structure and standards for conventional systems. The mechanism for accommodating current local codes and the disparity in code requirements was discussed and will be a definite challenge in gaining legislative support. The enabling legislation should contain provisions that yield predictable results. Discussion include options for adopting current local codes as the status quo, developing a statewide minimum standard for all systems, and redefining requirements based on lot size. Political and economic issues must also be given attention.

Please note: Due to previous schedules; Ted Loudon, Larry Stephens, Dan Milan, Chuck Cousino were not present. There will be the opportunity to address the above subjects during the next scheduled meeting.

The opportunity for the taskforce is to discuss and recommend points that will be utilized for the "white paper" that Ric Falardeau and Richard Sacks are preparing. I expect that document to be an overall report to the DEQ Director, the Governor and the Legislature. The "white paper" was due approximately May 17 or May 24, 2004. A meeting will be called to review and discuss the "white paper" by the task force. MOWRA will then address and comment on that document.

For any additional questions or comments, please feel free to contact Dan Milan.

MDEQ Meeting Minutes on the Web...

Web directions: Google Search – MDEQ, Pick: Department of Environmental Quality, Left hand column – choose "Water," Under Announcements – Choose "Statewide Code for On-site Wastewater Treatment"

Note: MDEQ Website Update: http://www.michigan.gov/deq/0,1607,7-135-3313-88100—,00.html



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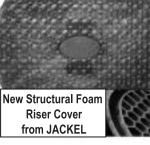
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January Onsite Conference Revisited

Ted L. Loudon

The Michigan Onsite Wastewater Conference held January 6-8, 2004 at the Kellogg Center in East Lansing was attended by 468 people. Based upon conference evaluation sheets returned the highlights of the conference included the EPA Perspective on Onsite and Decentralized Wastewater Treatment provided by Joyce Hudson of the Office of Wastewater Management in Washington, the Future of Onsite and Decentralized Wastewater Systems delivered by Dr. Richard Otis of Ayres and Associates in Madison, Wisconsin, the presentation on the Use of Chipped Tires in Drain Fields by Robert Patton from the Central Michigan Health Department and the information on Septage Management particularly liquid solid separation using a geo-textile bag. Joyce Hudson reviewed the U.S. EPA programs related to onsite and decentralized wastewater treatment and provided each conference attendee with a CD containing the latest EPA documents on this subject. Ms. Hudson reviewed the voluntary management guidelines that EPA has developed and encouraged that each regulatory jurisdiction consider adopting one of the management levels within their program.



President, Bill Gregory welcomes everyone to the conference opening and key speeches.



Ms. Joyce Hudson from the EPA Office of Wastewater Management in Washington.



Dr. Ted Loudon, Mr. Dick Otis, Ms. Joyce Hudson, and Mr. Steve Aguinaga waiting for lunch to arrive.

Richard Otis reviewed the history of onsite and decentralized wastewater treatment and discussed how these technologies need to fit into the total wastewater infrastructure of the future. He recognized that there is a place for traditional collection and treatment systems and individual onsite as well as various levels of technology that can be implemented as decentralized wastewater treatment systems. Dr. Otis discussed the development of a management program in Northern Minnesota that is intended to be a model approach to performance based regulation and practice. Dr. Otis emphasized the key issue of management. He discussed three of the five options that are presented in the EPA Voluntary Management Guidelines. Specifically, Otis discussed a management arrangement where the property owner is also the system owner and operator with assistance from the regulatory agency and certified service providers. He also discussed the scenario where a responsible management entity is the system operator and a third where a responsible management entity is both owner and operator of the wastewater treatment system.

Many of the presentations will soon be available on both the MEHA (www.meha.net) and the MOWRA (www.mowra.org) websites.

The Planning Committee for the 2005 Michigan Onsite Wastewater Conference has met to review the evaluations from the 2004 conference. Based upon the very favorable responses regarding the Kellogg Center, the decision has been made to hold the 2005 Conference at the Kellogg Center once again and the dates will be January 11-13, 2005.



Mr. Dale Ladouceur, MDEQ Water Division, giving a presentation.



The Milan crew take a moment from working their booth and helping with the conference.



This is my brother Bill, and my other brother Bill.

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April 27, 2004 Meeting Attendees

Statewide Code for On-site Sewage Wastewater Treatment Task Force Members

Mr. John Warback for Mr. Mark A. Wyckoff Planning and Zoning Center, Inc.

Mr. Larry Stephens Michigan Association of Realtors

Mr. Dan Milan Michigan On-Site Wastewater Recycling Association

Mr. Robert Patzer Associated Underground Contractors

Mr. Tom Frazier and Ms. Maxine McClelland Michigan Township Association

Mr. Jack Belt Michigan Groundwater Association

Ms. Dianne McCormick Michigan Association of Local Public Health

Mr. Joe Fivas Michigan Municipal League

Mr. William A. Crawford Northwest Michigan Sewage Task Force

Mr. William R. Rustem At Large Member Mr. Chuck Cousino Technical Advisory Council

Dr. Ted Loudon At Large Member

Ms. Jackie Leshkevich Legislative Service Bureau

Ms. Elizabeth Fedrochuk for Mr. James Clift Michigan Environmental Council

Corky Overmyer Michigan Water Environment Association

Mr. Jim Spangler ACEC

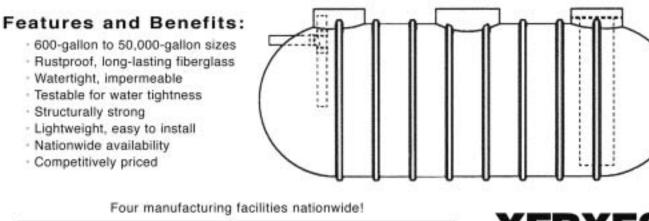
Mr. Richard Sacks Mr. Richard Falardeau Mr. Matt Smar DEO

Mr. Robert ZInn Private Citizen

Mr. Dennis Rupert Michigan Water Quality Association

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Associations and Reference Sites

EPA - Wastewater Management www.epa.gov/owm

Michigan Environmental Health Assn www.meha.net

> MOWRA www.mowra.org/main.htm

National Small Flows Clearinghouse www.nsfc.wvu.edu

> NOWRA www.nowra.org

Septic Info www.septic-info.com BOSS ENGINEERING

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> Jon Caterino, P.E. jonc@bosseng.com

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