#### SOME SESSION HIGHLIGHTS:

#### LET'S THINK TANK

"Let's Think TANK "(FREE Tuesday Session) will cover the purpose and Function of Septic Tanks. Septic tanks serve as the building block for all on-site systems. Over the last 20 years the industry's focus has been on absorption systems and advanced treatment systems. The seemingly forgotten septic tank warrants increased awareness and understanding. This presentation brings us forward to re-examine the operation and function of that critical first stop after the flush. Issues surrounding the structural condition and safety of aging septic tanks as well as proper tank location and the importance of watertight conditions will be discussed. The findings revealed from a three year study of septic tank conditions as identified during time of sale inspections will also be outlined. Both beginners and those in need of a renewed perspective will find this presentation beneficial. Regina Young is Supervisor of the Barry-Eaton District Health Department and also serves as secretary of the Michigan Onsite Wastewater Conference Planning Committee.

#### SPECIAL GUEST

Michigan State Representative Ken Goike was elected in November 2010 to his first term in the Michigan House to represent residents of (District 33) Clinton, Macomb and Ray Townships. Representative Goike is the owner of Goike Trucking and Excavating. He also has experience working in agriculture, septic and water delivery. Goike is the current president of the Armada Fair, and is a member of the Michigan Farm Bureau, the Michigan Builders Association and the Michigan Septic Tank Association. He was the primary sponsor of House Bill 4578. This bill is an attempt to remedy the increased transportation costs by requiring local units that have banned the land application of septage waste to make available a receiving facility with a service area that encompasses the entire local unit and to ensure that the receiving facility can and will accept all septage waste generated in the local unit.

#### **KEYNOTE SPEAKERS**

Highlighting the Conference this year will be two featured speakers highlighting the application and importance of decentralized systems in today's world.

**Sara Heger** is an Extension Specialist with the University of Minnesota. Among many hats she wears, she is the chairperson of the Minnesota State Advisory Committee on Decentralized Systems. She will be presenting a case study on a community in Minnesota called "Otter Tail Lake". This experience dates back to the 1980's, when the community decided that the best way to address their wastewater problems was to use improved onsite and small cluster systems around the lake. Along with the construction of new decentralized facilities, the community created what has proved to be a successful management program.

**Dr. John Buchanan** is an Associate Professor in the Bio-systems Engineering and Soil Science Department at the University of Tennessee. He was the project leader for a recently published study funded by the Water Environment Research Foundation (WERF) entitled "Performance and Costs of Decentralized Unit Processes". This study focused on providing local decision-makers the tools necessary to compare the various decentralized technologies as they consider the options that might meet their needs. Dr. Buchanan will highlight the features of this study, and discuss how it may be of help to local communities in Michigan.

#### ADVANCED REGISTRATION REQUIRED DEADLINE: DECEMBER 28, 2011

#### Instructions:

- 1. Each Registrant must complete a separate registration form. Copies of this form are acceptable. Group checks are also acceptable.
- Complete all parts of the form. Check appropriate boxes. All of Tuesday sessions are free except the morning session: "Lifting & Digging Equipment: Construction Cranes & Rigging" (this session requires a \$50.00 fee) and the all-day session: "Advanced Onsite Workshop - Wastewater Management Using Decentralized Methods" (this session requires a \$100.00 fee).
- 3. No refunds will be granted after 12/28/2011
- 4. Hotel reservation (<u>PLEASE</u> reserve prior to12/18/11) Kellogg Center 800-875-5090 or 517-432-4000.

#### FOR MORE INFORMATION ON TOPICS AND SPEAKERS:

www.meha.net / www. mowra.org / www.msta.biz or call MDEQ at **517-241-1343** 

#### FOR MORE INFORMATION ON BOOTHS: Dan Milan 800-756-4526

The intent of the annual wastewater conference is to educate people involved in the on-site wastewater field. The conference is a joint venture between the Michigan Onsite Wastewater Recycling Association (MOWRA), the Michigan Department of Environmental Quality (MDEQ) with the Michigan Environmental Health Association (MEHA), the Michigan Septic Tank Association (MSTA), the Michigan Water Environmental Association (MWEA) and Michigan State University.

## PRIZES WILL BE AWARDED TO PARTICIPANTS THOUGHOUT THE CONFERENCE

#### ATTENTION MICHIGAN SEPTAGE HAULERS

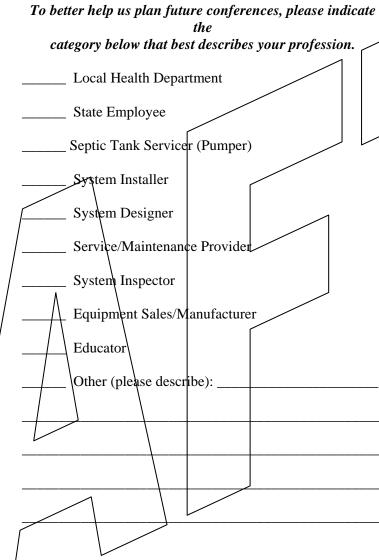
Up to 16-1/2 (CSE) continuing septage education hours are being accredited through MDEQ for the conference this/year.

\* REIMBURSTMENT IS AVAILABLE FOR MOST MICHIGAN LICENSED SEPTAGE HAULERS (ONE PER LICENSED FIRM) THROUGH THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY "CONTINUING SEPTAGE EDUCATION REIMBURSE-MENT REQUEST" EQP5918. MORE INFORMATION IS AVAILABLE ON THE WEB AT:

#### http://www.michigan.gov/deqseptage

\*\* Continuing Septage Education (CSE) tracking will be provided by the Michigan Septic Tank Association (MSTA). <u>There will be a fee for non-MSTA members</u> wishing a certificate of attendance and reporting. Questions may be directed to Lori Mattingly (MSTA Executive Officer) phone: 989-275-4947 or email: lorimatt@charter.net

#### **REGISTRATION FORM – Remove and mail**



#### **MEMBERSHIP DISCOUNT**

As indicated on the registration form, current paid up members of the following sponsoring associations are entitled to a \$10 discount from registration fees.

#### I AM A CURRENT PAID UP MEMBER OF:

\_\_\_\_\_ MOWRA (Michigan Onsite Wastewater Recycling Association)

\_\_\_\_\_ MSTA (Michigan Septic Tank Association)

\_\_\_\_MEHA (Michigan Environmental Health Association)

#### (REMEMBER TO SEND A COPY OF YOUR CURRENT MEMBERSHIP CARD OR CERTIFICATE WITH YOUR REGISTRATION)



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 Telephone: (517) 485-0660

 P.O. Box 13276
 Fax No. (517) 485-6412

 Lansing, MI 48901
 Fax No. (517) 485-6412

# 61st MICHIGAN ONSITE WASTEWATER CONFERENCE & EXHIBITS PRESENTS

#### "ON-SITE WORKS"

JANUARY 10 - 12, 2012

KELLOGG HOTEL & CONFERENCE CENTER MICHIGAN STATE UNIVERSITY EAST LANSING, MICHIGAN



REGISTRATION REQUIRED Conference Registration by December 28, 2011

#### Hotel Reservation by December 16, 2011 [Conference Rate \$77/Night + Tax] Call Kellogg Center 800-875-5090 or 517-432-4000 Mention Group Code #MOS010912

**Licensed Septage Haulers:** CSE Hours (Continuing Septic Education Credits) are offered at the conference through MSTA. Enrollment is required by 12-28-11. The form can be found at <u>www.msta.biz</u>. Please contact Lori Mattingly at 989-275-4947 with questions.

**Licensed Excavators:** (Residential Builders and/or Maintenance & Alteration Contractors) 3-credit hours of Continuing Competency are offered at the conference through (LARA).

SPONSORS: MDEQ, MEHA, MOWRA, MSTA, MSU, MWEA











MSTA P.O. Box 739 Roscommon, MI 48653

Addre

«Last\_Name



Tuesday/January 10, 2012

#### Michigan Occupational Safety and Health Administration (MIOSHA)

"Lifting & Digging Equipment: Construction Cranes & Rigging" This program is for owners and/or employees who wish to learn more on safety at the job site. This training program provides information relevant to the Michigan Licensing and Regulatory Affairs (LARA) Licensed Excavators (Residential Builders and/or Maintenance & Alteration Contractors) who are required to complete continuing education (Builders Continuing Competency) hours to renew their license. The program would also be beneficial to Michigan Department of Environmental Quality (MDEQ) licensed Septage Haulers for Continuing Septage Education (CSE) hours. This course is ideal for people new to the business and a good refresher for experienced operators. The course fee (\$50 - reimbursable formost Michigan licensed septage haulers) includes residential builders post-licensure accreditation for 3-hours continuing competency and septage haulers accreditation for 3-hours continuing septage education (two for one for those dual licensed). "Lifting & Digging Equipment: Construction Cranes & Rigging" training will be offered Tuesday 1/10/2012 from 8:30AM to 11:30AM and includes \* Note limited seating lùnch.

Are you in compliance with MIOSHA's crane regulations?

#### Michigan Occupational Safety and Health Administration (MIOSHA)

**Review of the Top 25** Serious MIOSHA Violations" This training program is for owners and/or employees who wish to learn more on being prepared for a MIOSHA Enforcement visit at their business, or job site. "Review of the Top 25 Serious MIOSHA Violations" training will be offered Tuesday 1/10/2012 from 12:30PM to 1:30PM. There is no cost for this program which has been accredited by MDEQ for 1-hour continuing septage education.

#### Michigan Department of Environmental Quality (MDEQ)

"Septage Hauler 101"

Training for those who are new to the Septage Transport/Disposal Business. "Septage Hauler 101" training will be offered Tuesday 1/10/2012 from 1:30PM to 3:30PM

There is no cost for this program which has been accredited by MDEQ for 2-hours continuing septage education.

#### Advance Onsite (All Day Session) Presented by Industry Experts Workshop on Wastewater Management Using Decentralized Methods

In conjunction with this year's conference the Biosystems Engineering Department at Michigan State University will offer a workshop on Tuesday, January 10th, on advanced design and management of decentralized wastewater collection and treatment systems. This will be an all-day session covering system design and management topics in depth. This is a great opportunity for those (cont.)

#### Tuesday/January 10, 2012 (cont.)

(cont.)

interested in how decentralized options can provide a more affordable and sustainable wastewater infrastructure for the future. This workshop is offered at an additional cost of \$100 to conference attendees, with a limited number of scholarships available through MOWRA to help cover some of the cost. These scholarships are not limited to MOWRA members. Be sure to look over the separate insert that provides more detail on the agenda and speakers.

#### Other (FREE) Tuesday Concurrent Sessions:

- Let's Think TANK Purpose and Function of Septic Tanks
- Proprietary Certification Programs
- Water Softener Research
- Septic Tank Issues Seen in the Field
- Three Year Review of a Time of Sale Inspection Program
- Time Dose and Pump & Dump Systems
- Ergonomic lifting, bending, twisting, etc.

# Up to 6 (CSE) continuing septage education hours are being accredited through MDNRE for Tuesday. Lunch is provided with registration each day.

#### Wednesday/January 11, 2012

Special Guest - Michigan State Representative Ken Goike

- Decentralized Systems "Otter Tail Lake Case Study"
- Performance and Costs of Decentralized Unit Processes
- Michigan Criteria Update
- FOG (Fats, Oils & Grease) Handling with Septage Waste
- Advance Treatment & Drip Irrigation
- MDEQ Question & Answer Session
- Composting Toilets
- MSTA Association Meeting
- MOWRA Association Meeting

#### Thursday/January 12, 2012

• Round Table Discussions (12 + tables) 8:15AM—11:15AM Planned Roundtables:

- 1. Computers in the Office
- 2. Tax Breaks Your Business Should Get
- 3. Ways to Advertise Your Business
- 4. Grease Separation and Use as an Alternative Energy
- 5. Septage Haulers ask the MDEQ Program
- 6. Employee First Aide and the Importance of Incident and Other Accident Documentation
- 7. Workplace Safety / Blood Borne Pathogen Protection
- 8. Riser Issues
- 9. Pipes and Fittings
- 10. Portable Restroom Tips and Tricks
- 11. How to Pump a Septic Tank

12. General On-Site Q&A with MDEQ & Local Health Departments

#### OTHER SESSIONS 11:15AM to 3:00PM

- LUNCH—INCLUDED
- Good Septage Truck Maintenance
- Sustainable Use for Waste Food Grease
- Update on Working with Rural Wastewater Districts for Septage Disposal
- Alternative Onsite Systems for Tight Sites
- Comingling Wastes for Energy Production Anaerobic Digestion
- Unique Onsite Experiences "Let's learn from one another." Panel Discussion
- Onsite Safety Issue Experiences Panel Discussion

# MICHIGAN STATE UNIVERSITY

#### Advanced Onsite Workshop Tuesday, January 10, 2012 Wastewater Management Using Decentralized Methods

The Biosystems and Agricultural Engineering Department at Michigan State University has made arrangements with the Planning Committee for the 2012 Onsite Wastewater Conference to sponsor a workshop on Wastewater Management Using Decentralized Methods and Advanced Treatment Technologies as a part of the Annual Conference. It will be held at the Kellogg Center on the MSU campus as a full-day workshop on Tuesday, January 10<sup>th</sup>, and will cover design and management issues in more depth than design workshops offered in the past at the MSU MOWTEC Training center. Attached you will find the proposed program agenda for the day. And this year there are <u>two</u> ways for you to take advantage of this workshop.

#### **On-site Attendance and Participation**

Attendees may take part in the workshop as it is presented at the Kellogg Center. The fee for this workshop will be **\$100.00 per person**. There are scholarships available to pay  $\frac{1}{2}$  of the cost for local health department personnel that attend this session at the conference.

#### Webcasts at Remote Venues

MSU and the Conference Planning Committee are making plans to offer this program as a **LIVE WEBCAST** into remote venues offsite with the goal of making the educational experience available to a wider audience. Arrangements are being made to teleeast the workshop over internet connections to audiences in other locations; with opportunities for interaction throughout the day with the workshop presenters. It is our hope that this will offer opportunities for training and education to a wider audience during these times of economic stress that limit travel expenses.

We expect there will also be a nominal charge at these off-site venues for attendees, and that charge may vary with the location, depending upon local expenses. Lunch will be provided if you attend the workshop at the Kellogg Center. Watch your mail or keep in touch with your respective association for further information on off-site venues. You may also call Larry Stephens at MOWRA (517) 339-8692 for updated information.

The subject matter to be presented will be appropriate for a wide range of interests including: local environmental health staff, designers, planners, and key local decision-makers. Enclosed also is information on the speakers for the workshop. You may register for the workshop to be held at Kellogg Center with your registration form for the conference.

Department of Biosystems and Agricultural Engineering

216 Farrall Hall East Lansing, MI 48824-1323 Phone: 517-355-4720 Fax: 517-432-2892

MSU is an affirmative action, equal-opportunity employer.



#### Advanced Decentralized Wastewater System Design and Management Workshop

		, i unu	gement Workshop	
Session Time	Subject		Topics Covered	
8:30 - 8:35 AM	Introduction		Larry Stephens	
8:35 - 9:15 AM	Treatment in Soil Component		Physical, chemical & biological process- es, soil loading rates, nutrient removal mechanisms Speaker: TBD	
9:15 - 9:30 AM	Q & A - Soils			
9:30 - 10:15 AM	Advanced Dispersal Systems		Dosing methods, pump design & types, timed and pressure distribution, drip dispersal Speaker: TBD	
10:15 - 10:30 AM	Q & A - Dispersal Systems			
10:30 - 10:45	Break			
10:45 - 11:45 AM	Technologies for Advanced Treat- ment		Various technologies for use in ad- vanced onsite and cluster systems; in- cluding mounds, packed bed filters, fixed and suspended growth ATU's, Lagoons & storage ponds Speaker: TBD	
11:45 - 12:00 Noon	Q & A - Trea Technolo			
12:00 - 1:00 PM	Lunch Br	eak		
1:00 - 1:30 PM	Septic tanks		Principles of settling, effluent screens, structural integrity and water tightness, risers and safety devices, pumping fre- quency Speaker:/TBD	
1:30 - 1:40 PM	Q & A - Se tanks	eptic		
1:40 - 2:15 PM	System Ma ment	nage-	How to assure systems are properly maintained, management program con- cepts Speaker: TBD	
2:15 - 2:30 PM	Q & A System Management			
2:30 - 3:15 PM	Role of Decentral- ized Systems in the Future		How can improved onsite and cluster systems meet our wastewater infrastruc- ture needs of the future? Cost effec- tiveness, performance, sustainability, water reuse, etc. <i>Speaker: TBD</i>	
3:15 - 3:30 PM	Q & A - Planning Applications & Other General Top- ics Covered			
3:30 PM	Wrap - up		Ted Loudon	

#### Workshop Speakers

#### Sara Heger

Since 1998, as an engineer in the Onsite Sewage Treatment Program at the University of Minnesota, Sara Heger has been providing education and technical assistance to homeowners, small communities, onsite professionals and local units of government regarding onsite wastewater treatment.

Sara also coordinates the research program at the UMN. Recently, Sara served as the PI and one of the lead authors on an updated training manual for onsite practitioners in Minnesota and Sara is also a lead author on the national project writing team for the Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT) Installer Curriculum Project. She presents at many local and national training events regarding the design, installation and management of septic systems and related research.

Sara is on the Board of Directors of the Minnesota Onsite Wastewater Association (MOWA). She is also the chair of the Minnesota State Advisory Committee on Decentralized Systems.

She has a MS in Water Resource Science (WRS) and a BS in Biosystems & Agricultural Engineering and is near completion of a PhD program in WRS at the U of MN.

# John R. Buchanan, Ph.D., P.E.

Dr. Buchanan is an Associate Professor and is on the faculty of the Biosystems Engineering and Soil Science Department at the Univer-sity of Tennessee. He has 21 years of teaching, research, and outreach experience in the areas of onsite wastewater management, water quality, storm water engineering, and agricultural waste management. Dr. Buchanan has B.S. and M.S. degrees in Agricul-tural Engineering and a Ph.D. in Civil Engineering, all from The University of Tennessee. John member of the Water Environment Federation, Spil and Water Conservation Society, and is a registered professional engineer in Tennessee.

### Dr. Fed Loudon, Ph.D., P.E.

Dr. Loudon is Professor Emeritus, Department of Biosystems and Agricultural Engineering, Michigan State University. He has been a leader in onsite and decentralized wastewater system education in Michigan for decades. Along with the Michigan Technical Advisory Council for Onsite Wastewater Treatment, he established the Michigan Onsite Wastewater Treatment, he established the Michigan Onsite Wastewater Training and Education Center and has served as director and one of the primary instructors for the facility. He is widely known for his leadership and wastewater expertise throughout the state of Michigan. In addition to service to Michigan, he has been one of a handful of national leaders in the decentralized wastewater field. In the National Onsite Wastewater Recycling Association, he served as board member and president.

Since retiring in 2004, Dr. Loudon has assisted numerous international organizations and missions in the development of wastewater solutions in developing countries. He has worked on projects in Afghanistan, Laos, Thailand, India, Kenya, Ghana, Honduras and Mexico. In 2008-09, along with professional engineer Larry Stephens, he developed a web-based class on Decentralized Wastewater Treatment for the MSU ECOSEAM project and continues to consult in this field.

#### Larry D. Stephens, P.E.

Since 1980 Larry has owned and operated Stephens Consulting Services, P.C., an experienced professional engineering design firm located in Haslett, Michigan. The staff of professionals at Stephens Consulting Services has helped both municipal and private business clients through the planning, design, permitting and construction stages of projects from start to finish. Wastewater collection and treatment has been a focus of the company since its inception, but especially over the last couple of decades. The use of decentralized technology and management methods as a more sustainable way of meeting our wastewater infrastructure needs of the future is the vision of Larry's company.

In addition to the design services of Stephens Consulting Services, Larry and his son Michael formed and operate SCS Systems, LLC, to provide operation and maintenance services under contract to both public and private owners of water and sewer systems. Larry and Michael are both DEQ certified water and wastewater system operators.

Larry has a Bachelors of Science degree from MSU and holds a Masters of Engineering Degree from the University of Florida. He has been a Licensed Professional Engineer in Michigan since 1971.

# Don't Miss this Opportunity!

This Workshop and the rest of the Conference this year will present solutions to wastewater problems in rural areas that were never considered possible by many. Furthermore, these same methods can also be used in some urban settings to provide more costeffective and sustainable wastewater management and reuse, as they have been in other parts of the country.

If you know someone else that would benefit from this information and discussion, please pass along this registration flyer and invite them to participate and/or bring them along with you.



Department of Biosystems and Agricultural Engineering

