

## Conference Agenda

### Turning Wastewater Theory into Practice

Tuesday, April 24<sup>th</sup>

7:30am Registration

#### OPENING GENERAL SESSION Moderator: Dr. Mike Hoover, NCSU

##### Area 1CD

8:30am Welcome

8:45am Introduction and Overview

8:55am Finding and Evaluating Septic Systems Using Electromagnetic Induction(EMI) Dr. Brad Lee, Purdue University

9:35am Membrane Filter Bioreactor(MBR) Technology: The New Kid on the On-Site Wastewater Block Sara Christopherson, University of Minnesota

10:15am Break in Exhibit Hall

10:45am Water Usage in Rental Communities: Design Theory Versus Field Realities Gerry Curran, Bord na Mona, Ireland

T&J Panel Awards Banquet

Master of Ceremonies: Joe Lynn, NCDENR

Recognition of 2007 On-Site Wastewater Conference Planning Committee and Call for 2008 Committee

Hall of Fame Presentation: Jimmy Shoaf, Shoaf Precast, Lexington, NC

Presented By: Gene Young

Sponsored By: Bord Na Mona

Steinbeck Award: Tom Konsler, Orange County Health Department

11:30am Presented By: Alan Clapp

Sponsored By: T&J Panel

Scholarship Award: Amy Heron, Toe River Health District

Presented By: Joe Lynn, NCDENR

Special Presentation and Recognition:

Development from Theory to Reality of the Land and Water

Hands-On Training Facility At NCSU & Lake Wheeler Road Field Laboratory

Presented By: Dr. Mike Hoover

Banquet Keynote Talk: TBD

## CONCURRENT SESSIONS

	Session 2: Soils and System Siting Moderator: Alan Clapp, Orange County Health Department	Session 3: Engineering and Design Moderator: Tom Konsler, Orange County Health Department	Session 4: Volunteered Papers and Student Paper Competition Moderator: Dr. Diana Rashash, NCSU
	Area 1CD	Area 6	Area 3
1:30:pm	Relationships Between Soil Morphology and Field Soil Hydraulic Conductivity in Northeastern Indiana Dr. Brad Lee, Purdue University	The Ten Commandments of Design Trish Angoli, NCDENR	Determining the Effect of Septic System Vertical Separation Distance on Ground Water Quality in Coastal North Carolina Charlie Humphrey, NCSU & ECU
2:00pm	Correlation Between Hydraulic Conductivity and LTAR? Kevin Martin, S&EC Dr. Bob Uebler, NCDENR	Designing Influent Sampling Access in Pretreatment Technologies Dr. Doug Joy, University of Guelph	Nitrate Transport and Persistence Above the Water Table Sergio Abit, NCSU
2:30pm	Pretreatment Systems: Where to Use Them and How to Site Them Joe Lynn, NCDENR	Break in Exhibit Hall	Solid Accumulation and Septic Tank Pumpout Frequencies Dr. Sushama Pradhan, NCSU
3:00pm	Break in Exhibit Hall	Design of Gravel Filters for Large Systems Darren Meyers, Zoeller Company	Break in Exhibit Hall
3:30pm	Water Flow Below Simulated Septic System Trenches Dr. Aziz Amoozegar, NCSU	Septic Tank Design, Function and Performance Vic D'Amato, ARCADIS	Standardizing On-site Terminology: Development of a National Glossary Nancy Deal, NCSU
4:00pm	Oxyaquic Conditions: Soil Wetness Beyond 2 Chroma Dr. David Lindbo, NCSU	Design of Advanced Treatment Technology for Failure Remediation: Real World Case Studies from Virginia Dr. Anish Jantrania, Virginia Department of Health	Microbial Septic Tank Sampling: When a Tank Appears to be "Dead" Dr. Barbara Hartley Grimes, NC DENR

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4:30pm New Soil and Siting Requirements for LSS Reports By DWQ Rich Hayes, NCDENR Engineering and Practical Design of Membrane Filter Bioreactors (MBRs) for Small Flows Shane Keaney, Bord na Mona Adjourn

5:00pm Reception in the Exhibit Hall: Food, Friendship and Door Prizes Scott Greene, Guilford County Health Department Dr. David Lindbo, NCSU

Wednesday, April 25th

7:30am	Continental Breakfast
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CONCURRENT SESSIONS

<p>Session 5: Remote System O &amp; M Moderator: Drew Morgan, Durham County Health Dept.</p>	<p>Session 6: System Function and Performance Moderator: Chad Rakes, Forsyth County Health Dept.</p>	<p>Session 7: Volunteered Papers Tracks Moderator: Dr. Bob Uebler, NCDENR</p>
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	Area 6	Area 1CD	Area 3
8:30am	Remote Monitoring and Remote System Operation Overview Trish Angoli, NCDENR	Field Performance of Type IV A Systems (LPP Systems) Over the Past 15 Years: Inspection and Monitoring George Pendergrass, Catawba County Health Department	A Submerged Attached Growth Bioreactor for Decentralized Wastewater Treatment Philip Pedros, F. R. Mahony & Associates
9:00am	NSF International Web-Based Remote Monitoring Program Paul Jackson, NSF International	Capillary Flow of Pollutants Above the Water Table in Simulated Septic Systems Dr. Aziz Amoozegar, NCSU	Addressing Issues of Nitrogen Removal: Operation and Maintenance Mark Lubbers, Aquapoint, Inc.
9:30am	Real World Examples of Public Health Protection Using Remote Monitoring Tom Konsler, Orange County Health Department	Break in the Exhibit Hall	On-site Wastewater Treatment Systems in North Carolina on Macro, Meso and Micro Scales Dr. Sushama Pradhan, NCSU
10:00am	Break in the Exhibit Hall	Field Evaluation of Rock Filled and Infiltrator Chamber Trench Systems in Minnesota Sara Christopherson, University of Minnesota	Break in the Exhibit Hall
10:30am	Vericomm Remote Monitoring and System Operation Technologies Steve Barry, AQWA	Effects of Siting, Design, System Age, Operation and Maintenance on Failure Rates of On-Site Systems Dr. Mike Hoover, NCSU	Emerging Contaminants (EDCs & PPCPs): Comparison of Waste Treatment Systems and Research in NC Dr. Barbara Hartley Grimes, NC DENR

Cont.

11:00am	Remote Monitoring Technologies for Large Systems Tom Ashton, American Manufacturing	Pump to Conventional and Pressure Manifold System Performance Greg Grimes, Orange County Health Department	Aerobic Micro Organism Technology Commercial Septage Receiving and Treatment Facility John Campbell, Big Fish Environmental, LLC
11:30am	County Remote Monitoring Program for Advanced On-site Technologies in Harris County, Texas John Blount, Harris County, Texas	Dirty Jobs: Video Technology for Locating and Assessing Septic System Function Ben Kane, Carteret County Health Dept.	Adjourn
12:00	Break for Lunch on Your Own NOTE: The 2008 NC On-Site Wastewater Conference Planning Committee Will Hold Its First Meeting During Lunch		

CLOSING GENERAL SESSION  
New Rules and Directions for the Wastewater State-of-Practice  
Moderator: Joe Lynn, NCDENR

Area 1CD

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| 1:00pm | On-Site Wastewater Technology: The Canadian Experience   | Dr. Doug Joy, University of Guelph           |
| 1:30pm | Navigating the OSWP Website to Keep Up With Product Approvals  | Kae Arrington, NCDENR                        |
| 2:00pm | New Septic Tank Installer and Inspector Certification Requirements   | Gene Young, NCDENR                           |
| 2:30pm | Break in Exhibit Hall – Special<br>Give-Away Prizes and Door Prizes<br>Scott Greene, Guilford County Health Department<br>Dr. David Lindbo, NCSU |  |
| 3:00pm | What the Field Practitioner Needs to Know for Tomorrow About the New Rule .1970 and Use of Pretreatment Systems                                  | Anne Lowry, Chatham County Health Department |
| 3:45pm | New Statewide Well Statute and How It Will Affect County Programs  | David Eudy, NCDENR                           |
| 4:15pm | Adjourn McKimmon Center Portion of Conference  |  |

Thursday, April 26th

Field Day Options

Choose 1 of 7 Field Options.

Transportation to your selected Field Option is on your own.

Maps and further information will be provided at the conference.

Time: All tours run 8:30am-12:30pm.

Attire: Please watch the weather. Wear waterproof footwear, and bring rain gear.

Tours will run outdoors, rain or shine.

Options	Location	Topic	Tour Leader
Option 1	Lake Wheeler Road Field Laboratory in Wake Co.	Fitting in With Pretreatment: Design Review and Installation Inspections Field Tour	Ben Kane, Trish Angoli and Christine Nitt
Option 2	Cooperative Extension Center in Craven Co.	How to Get the Word Out: Public Education Programs and Materials Workshop	Charlie Humphrey, Todd Kraft and Dr. Diana Rashash
Option 3	Lake Wheeler Road Field Laboratory in Wake Co.	The “Ten Commandments” of Design Workshop	Dr. Mike Hoover
Option 4	Research Station in Laurel Springs in Ashe Co.	Mountain Soils Field Tour: Properties, Distribution and Suitability for On-Site Systems	Alan McKinney and Joe Lynn
Option 5	Breeze Farm NC Cooperative Extension site in Orange Co.	Piedmont Slate Belt Soils Field Tour: Properties, Distribution and Suitability for On-Site Systems	Scott Greene, Dr. David Lindbo and Alan Clapp
Option 6	Lake Wheeler Road Field Laboratory in Wake Co.	Pretreatment Systems and Their Implementation: Implications of New State Rules	Dr. Bob Uebler and Steven Berkowitz
Option 7	Lake Wheeler Road Field Laboratory in Wake Co.	Field Installation Demonstration for Installers and EHSs	Joe West and Hank Sowers