



Presents

**ELEVENTH NATIONAL
SYMPOSIUM ON
INDIVIDUAL AND SMALL
COMMUNITY SEWAGE
SYSTEMS**

**Crowne Plaza Hotel
at the Crossings**

Warwick, Rhode Island

October 20-24, 2007

Preliminary Program

PROGRAM OVERVIEW

Sunday, October 21

1:00PM REGISTRATION

Monday, October 22

7:00AM REGISTRATION

8:00AM-12:00PM GENERAL SESSION

Welcome

Keynote - "Untargeted Water Management"

Glossary Project

EPA Partners

1:00PM-4:30PM

CONCURRENT SESSIONS

I. Treatment and Performance of Systems

II. Nitrogen in the Onsite Treatment System

III. System Management and Policy - Part 1

Tuesday, October 23

7:00AM REGISTRATION

8:00AM-12:00PM CONCURRENT SESSIONS

IV. Better System Design

V. Technology Applications - Part 1

VI. System Management and Policy - Part 2

1:00PM-4:30PM

CONCURRENT SESSIONS

VII. Technology Applications - Part 2

VIII. In-Ground Soil Treatment System Performance

IX. Integrated Water Management

Wednesday, October 24

7:00AM REGISTRATION

8:00AM-12:00PM CONCURRENT SESSIONS

X. Soil as a Treatment Component

XI. Treatment and Performance of Systems

HOUSING & TRAVEL

Crowne Plaza Hotel at the Crossings Warwick is located approximately 10 miles south of downtown Providence and two miles from Providence TF Green Airport. This location is also eight miles from Rodger Williams Park Zoo, 10 miles from Providence Place Mall, 20 miles from Newport beaches, and 38 miles from Mystic/Foxwoods Casinos.

Hotel amenities include the indoor swimming pool, sauna, whirlpool, health center, and restaurant. The hotel also offers room service, babysitting, a concierge, dry cleaning, currency exchange, and a gift shop.

All rooms feature high-speed Internet access, bathrobes, hairdryers, irons and ironing boards, coffeemakers, CD players, safes, individual climate control, in-room movies, and satellite TV.

Room rates are \$120 per night single/double plus 13% taxes

To make your hotel reservation contact:

Crowne Plaza Hotel at the Crossings

801 Greenwich Ave (Route 5)

Warwick, Rhode Island 02886

Phone: 401-732-6000

Fax: 401-732-4839

Reservations: 877-227-6963

www.crowneplazari.com

You must identify that you are with the American Society of Agricultural and Biological Engineers to receive the conference rate.

Transportation to and from Hotel

Providence- TF Green Airport (PVD)

* Distance: 2 MI / 3.22 KM South West to Hotel

* Complimentary Airport Shuttle

* Taxi Charge (one way): \$5.00 (USD)

* Time by taxi: 7 minutes

Ground transportation is located on the lower level of the airport near the baggage claim.

Carriers servicing TF Green Airport are Air Canada, American, Continental, Delta, Northwest, Southwest, United and US Airways.

BOSTON-LOGAN AIRPORT (BOS)

* Distance: 62 MI / 99.78 KM South to Hotel

* Taxi Charge (one way): \$100.00 (USD)

* Time by taxi: 1 Hour 15 minutes+

TRAIN

* Station Name: Amtrak

* Distance: 12 MI / 19.31 KM South to Hotel

* Taxi Fee From Train Station: \$20.00 (USD)

SUNDAY, OCTOBER 21

1:00PM REGISTRATION

MONDAY, OCTOBER 22

7:00AM REGISTRATION

8:00AM GENERAL SESSION

Welcome

Keynote: “Untargeted Water Management”

Speaking the Same Language: A Glossary for the Decentralized Wastewater Treatment Field

Deal, N., J. Buchanan, K. Farrell-Poe, M. Gross, D. Gustafson, D. Kalen, B. Lesikar, D. Lindbo, G. Loomis, J. Mechell, R. Miles, C.O'Neill

EPA Partners

1:00PM CONCURRENT SESSIONS - I, II, III

I. TREATMENT AND PERFORMANCE OF SYSTEMS

Moderator: TBA

1:30PM Modeling Long Term Acceptance Rates for OWMSs

Radcliff, D.E. and L.T. West

2:00PM Developing Indicators of Contamination Originating From On-site Wastewater Treatment

Chalew, T. and H. Weinberg

2:30PM Modeling of Phosphorus Reactions during Wastewater Infiltration using Analytical and Numerical Modeling Techniques

Lindstrom, K.A., J.E. McCray and G.D. Thyne

3:00PM BREAK

3:30PM Organic Contaminants in Onsite Wastewater Treatment Systems

Conn, K.E., R.L.Siegrist, L.B.Barber, and G.K.Brown

4:00PM Molecular Characterization of the Microbial Community in Onsite Treatment Units

Tomaras, J., J.W. Sahl, J.R. Spear and R.L. Siegrist

II. NITROGEN IN THE ONSITE TREATMENT SYSTEM

Moderator: TBA

1:30PM Re-examining “Nitrate Toxicity”: A Call for a More Rational Approach to Effluent Limits for Nitrogen in Decentralized Wastewater Treatment

Churchill, J

2:00PM Nitrogen Removal for Cluster Residential and Commercial Development, Main Street Village, Mashpee, MA

Lombardo, P.

2:30PM Modeling the Effect of Population Growth on Stream Nutrient Concentration in Turkey Creek Watershed using WARMF Model

Geza, M and J.E. McCray

3:00PM BREAK

3:30PM Correlating Denitrification Rates to Soil Texture Using Hierarchical Cluster Analysis

Tucholke, M.B., J.E. McCray, G.D. Thyne and R.M. Waskom

MONDAY, OCTOBER 22

- 4:00PM** **Wastewater and Nutrient Reuse from an Office Building – The Huber ReUse Concept**
Schuler, S.
- III. SYSTEM MANAGEMENT AND POLICY - PART 1**
Moderator: TBA
- 1:30PM** **Utilizing GIS and Land Management Data to Assess Onsite Wastewater Facilities in Small Communities**
Brewer, A.T.
- 2:00PM** **Integrating Rural Wastewater Management: Crow Wing County Sanitary Management District**
Gilbertson, C. and R.J. Otis
- 2:30PM** **The Politics of Sewage Disposal – Montgomery County (MD) On-site Systems: Should They be Used to Regulate Growth?**
Von Guten, U.
- 3:00PM** **BREAK**
- 3:30PM** **Translating a Risk-based Land-use Planning Issue to a Decision Making Tool Using Simple GIS Approaches**
Carroll, S., E. Thomas, L. Fiedling, C. Dowding, L. Dawes and A. Goonetilleke
- 4:00PM** **On-site Wastewater Permit Nightmares or Easy Ways to Pay Tort Claims**
Young, G., Neal, K., J. Lynn, D. Lindbo and A. Adams

TUESDAY, OCTOBER 23

- 7:00AM** **REGISTRATION**
- 8:30AM** **CONCURRENT SESSIONS IV, V, VI**
- IV. BETTER SYSTEM DESIGN**
Moderator: TBA
- 8:30AM** **Engineering of Soil Treatment Units as a Unit Operation in Onsite Wastewater Reclamation Systems**
Robert L. Siegrist
- 9:00AM** **A Comparison of Conventional Septic Tank Systems and Alternative Horizontal Subsurface-flow Reed Bed Systems in the Treatment of Domestic Wastewater**
O’Luanaigh, N., L. Gill, T. Patel, P. Johnston and B. Misstear
- 9:30AM** **Conduction Shape Factor Method Applied to the Modeling of Oxygen Diffusion Through Soil**
Janna, W.S.
- 10:00AM** **BREAK**
- 10:30AM** **Long Term Impacts of Micro-Irrigation "Drip" Treatment and Disposal Systems on Delaware’s Marginal Soils**
Hayes, J.G. and A.N. Moore
- 11:00AM** **Improved Sizing Methodology for Subsurface Wastewater Infiltration Systems**
White, K.D.
- V. TECHNOLOGY APPLICATIONS - PART 1**
Moderator: TBA
- 8:30AM** **Performance Evaluation of a Top Loading Vertical Flow Constructed Wetland**
Spokas, L.A., P.L.M. Veneman, S.C. Simkins and S.C. Long
- 9:00AM** **Design of Delivery Device for Chlorine Dioxide Disinfection**
Gulian-Krishnaswamy, H. and K.M. Mancl
- 9:30AM** **Treatment of Turkey Processing Wastewater with Sand and Sand-Textile Bioreactors**
Gaur, R.S., K. M. Mancl and O. H. Tuovinen

TUESDAY, OCTOBER 23

- 10:00AM** **BREAK**
- 10:30AM** **Factors Affecting the Performance of Primary Treatment Units in Onsite Systems**
Victor A. D'Amato, Sarah K. Liehr
- 11:00AM** **Evaluating Pressurization Time and Application Uniformity for Residential Drip Fields**
Duan, X., B.J. Lesikar, R.A. Persyn, A.L. Kenimer, J.K. Mechel
- VI. SYSTEM MANAGEMENT AND POLICY - PART 2**
Moderator: TBA
- 8:30AM** **An environmental education program in dairy area; wastewater treatment with constructed wetland and nitrogen cycling**
Uchida T., K. Nekomoto, S. Hoshiba, K. Takahashi , A. Takai, T. Arase and F. Tazak
- 9:00AM** **Qualitative Risk Assessment of Decentralized Wastewater Management Systems in a Drinking Water Catchment**
Asquith, B.A., J.. Whitehead and L.Kidd
- 9:30AM** **Updating North Carolina's Education and Training Curriculum for Onsite/Decentralized Wastewater Treatment System Operators**
Reid, S., N. Deal, B. Buffington and D. Lindbo
- 10:00AM** **BREAK**
- 10:30AM** **The Evolution of Decentralized Wastewater Management Regulations in Tennessee**
Buchanan, J.R.
- 11:30AM** **Field Performance of Advanced Wastewater Pretreatment Systems – Inferences from North Carolina's Experience**
S.J. Berkowitz
- 1:30PM** **CONCURRENT SESSIONS VII, VIII, IX**
- VII. TECHNOLOGY APPLICATIONS – PART 2**
- 1:30PM** **Controlled Field Performance Evaluation of a Drip Dispersal System Used for Wastewater Reclamation in Colorado**
Parzen R.E., J.Tomaras and R.L. Siegrist
- 2:00PM** **Fixed Film Pretreatment of Winery Wastewater Using BioCOIR**
Corwin, B.K., T. Petty, K.M. Sherman
- 2:30PM** **The Benefits of a Variance Procedure in Onsite Wastewater Regulations**
Sherman, K.M.
- 3:00PM** **BREAK**
- 3:30PM** **Removal of COD and BOD5 in Sanitary Sewer Overflow with Fixed Media Bioreactors**
Tao, J., K. Mancl, O.H. Tuovinen
- 4:00PM** **Pretreatment of Turkey Fat in Wastewater in Sand Bioreactors**
Gaur, R.S., K.M.Mancl and O.H.Tuovinen
- 4:30PM** **Spectrophotometric Measurement of Chlorine Dioxide Residuals in Wastewater Disinfection Using**
Lissamine Green B, Rashmi Singh Gaur and Karen M. Mancl
- VIII. IN-GROUND SOIL TREATMENT SYSTEM PERFORMANCE**
Moderator: TBA
- 1:30PM** **A Comparison Between Distribution Devices used to Split On-site Wastewater Effluent Between Percolation Trenches**
Gill, T., T. Patel and N. O'Lunaigh
- 2:00PM** **Remote Wastewater Dispersal Fields**
Greene, R.S., B.H.Ward and D. Lindbo
- 2:30PM** **Thickness and Hydraulic Properties of Drainfield Trench Biomats formed in Georgia Soils**
Finch, S.D., L.T.West, D.E.Radcliffe and E.V.Hufstetler

TUESDAY, OCTOBER 23

- 3:00PM** **BREAK**
- 3:30PM** **Development of A Standard for Gravelless Trench Products results of a Pilot Protocol Series**
Heufelder, G. K. Mroczka, S. Pradhan, M. Hoover and T. Stevens
- 4:00PM** **Evaporation-Transpiration-Infiltration Disposal Trenches**
Ahart, T.E.
- 4:30PM** **Wastewater Infiltration and Water Movement Around Trenches of Septic Systems**
Aziz Amoozegar, Kevin Martin, Christopher Niewoehner, and David Lindbo
- IX. INTEGRATED WATER MANAGEMENT**
Moderator: TBA
- 1:30PM** **Water Quality Profile of an Urbanising Catchment**
Goonetilleke, A., S. Carroll, L. Daws and M. Hargreaves
- 2:00PM** **Runoff Treatment with Aspen Wood**
Thomas B. Boving, Joshua Klement, Bethany Thienel, Beverly Johnson
- 2:30PM** **Selection of An Appropriate Winery Process Wastewater Treatment Technology**
Glenn Dombeck, Maher Tleimat
- 3:00PM** **BREAK**
- 3:30PM** **Engineering of Soil Treatment Units as a Unit Operation in Onsite Wastewater Reclamation Systems**
Robert L. Siegrist
- 4:00PM** **Effectiveness of Alternative On-site Wastewater Treatment Technologies in the Catskill/Delaware Watershed**
Hassett, J.M., A. Chan, J.S. Martin and T.DeJohn
- 4:30PM** **Distinguishing Wastewater Contamination from On-site Systems in Mixed Land Use Watersheds**
Geary, P.M., S.A. Lucas, R.H. Dunstan and P.J. Coombes

WEDNESDAY, OCTOBER 24

- 7:00AM** **REGISTRATION**
- 8:30AM** **CONCURRENT SESSIONS X, XI**
X. SOIL AS A TREATMENT COMPONENT
Moderator: TBA
- 8:30AM** **Soil Mineral Precipitate Responsible for Septic System Failure**
Lee, B.D. and D.G.Schultze
- 9:00AM** **Fecal Coliform Distribution Under Pressure Dosed Onsite Wastewater Systems.**
Miles R.J., R. Rubin, and L. West
- 9:30AM** **The Occurrence of Humic Substances and Polysaccharides in Soil Treatment Units used for Wastewater Reclamation**
McKinley, J.W. and R.L. Siegrist
- 10:00AM** **BREAK**
- 10:30AM** **The Effect of Water Softener Backwash Brine in Onsite Wastewater Treatment Systems**
Gross, M. and T. Bounds
- 11:00AM** **Soil Treatment Unit Performance as Affected by Hydraulic Loading Rate and Applied Effluent Quality**
Kathryn S. Lowe, Sheila M. Van Cuyk, Robert L. Siegrist
- 11:30AM** **Ground Water Mounding Under Large Systems in Areas with Shallow Water Table**
Aziz Amoozegar, David L. Lindbo, and Christopher Niewoehner

WEDNESDAY, OCTOBER 24

XI. TREATMENT AND PERFORMANCE OF SYSTEMS

Moderator: TBA

- 8:30AM** **Applying Soil Morphology to Long Term Acceptance Rate Determination**
Lindbo, D.L., J. Lynn, K.Neal, G. Young, A. Amoozegar
- 9:00AM** **Distribution of Inorganic Chemical Under a Small Community On-site Wastewater Disposal System**
Surbrugg, J.E. and A. Amoozegar
- 9:30AM** **Evaluating Existing Best Management Practices (BMP's) for Site Selection and Septic System Installation**
Deal, N., D. Lindbo, R. Coburn, D. Rashash, M. E.-Brunner, and C. Humphrey
- 10:00AM** **BREAK**
- 10:30AM** **Determination of Limits to Biological Loading Rate in Column Experiments with Florida Sandy Soil**
Roeder, E., D. Bloomquist and P.W. Booher
- 11:00AM** **Reduction of Bacteriologic and Chemical Constituents of Septic Tank Effluent with Depth Using a Drip Dispersal System**
Hepner, L.D., D. Linde, C. Weber, and D. Smith
-
- 1:30PM** **HIGH STRENGTH WASTE SEMINAR**
CIDWT



ELEVENTH NATIONAL SYMPOSIUM ON INDIVIDUAL AND SMALL COMMUNITY SEWAGE SYSTEMS



October 20-24-2007 – Warwick, Rhode Island

REGISTRATION

PLEASE TYPE OR PRINT CLEARLY

ASABE Member Number _____
 Name: _____
 Title: _____
 Company: _____
 Mailing Address: _____
 City: _____ State/Province: _____
 Zip/Postal Code: _____ Country: _____
 Daytime Phone: _____ Fax: _____
 E-Mail Address (mandatory): _____

REGISTRATION:

	EARLY Before Sept 20	REGULAR After Sept 20
ASABE Member Full Conference	<input type="checkbox"/> \$395.00	<input type="checkbox"/> \$460.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Preprofessional/Graduate Student Full Conference	<input type="checkbox"/> \$110.00	<input type="checkbox"/> \$145.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Developing Country:		
Member Low Income	<input type="checkbox"/> \$217.00	<input type="checkbox"/> \$253.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Member Lower-Middle Income	<input type="checkbox"/> \$277.00	<input type="checkbox"/> \$322.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Member Upper-Middle Income	<input type="checkbox"/> \$336.00	<input type="checkbox"/> \$391.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Nonmember Preprofessional/Graduate Student Full Conference		
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Nonmember Full Conference	<input type="checkbox"/> \$520.00	<input type="checkbox"/> \$580.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Developing Country:		
Nonmember Low Income	<input type="checkbox"/> \$286.00	<input type="checkbox"/> \$319.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Nonmember Lower-Middle Income	<input type="checkbox"/> \$364.00	<input type="checkbox"/> \$406.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
Nonmember Upper-Middle Income	<input type="checkbox"/> \$442.00	<input type="checkbox"/> \$493.00
Includes: Technical Sessions, Coffee Breaks, Lunch on Monday and Tuesday		
ONE DAY Member		
<input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday	<input type="checkbox"/> \$240.00	<input type="checkbox"/> \$272.00
Includes: Technical Sessions, Coffee Breaks.		
ONE DAY Nonmember		
<input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday	<input type="checkbox"/> \$300.00	<input type="checkbox"/> \$340.00
Includes: Technical Sessions, Coffee Breaks.		

OCTOBER 15, 2007 Onsite Registration Fees will be scheduled at a 10% increase of the regular rate.

TOTALS:

REGISTRATION \$ _____

TOTAL AMOUNT DUE \$ _____

PAYMENT
(MUST BE IN U.S. DOLLARS)

CHECK # _____

PURCHASE ORDER# _____
Purchase order form must accompany registration.

CHARGE TO THE FOLLOWING:
 MasterCard VISA
 AMEX DISCOVER

Card Number: _____

Exp. Date: MONTH ____ YEAR ____

Print Cardholder's Name: _____

Cardholder Signature: _____

ASABE
2950 Niles Road
St. Joseph, Michigan 49085
269-429-0300
Fax: 269-429-3852
Email: hq@asabe.org

CANCELLATIONS:
 All refunds subject to a \$50.00 cancellation fee. Requests for cancellation received in writing by fax, mail or email on or before September 20 deadline will be refunded. After September 20, 2007, no refunds will be issued.