AIA Peconic
A Chapter of The American Institute of Architects

NEW SOLUTIONS FOR COMMUNITY WASTEWATER TREATMENT
2011 Topic for THE FUTURE OF THE EAST END

APRIL 6 , 2011 8:30 A.M. to 5:30 P. M.

At **Suffolk County Community College's Culinary Arts and Hospitality Center**
20 East Main Street, Riverhead

A presentation of AIA Peconic, a Chapter of The American Institute of Architects

This symposium invites regulators, inventors, engineers, designers, planners, municipal representatives, builders, clients and the interested public to learn about and discuss the design of small community sewer systems appropriate for small communities, hamlets, clustered housing, and institutions.

SPONSORS:

Platinum: Genatt Associates
Gold: Chaleff and Rogers, Architects
Our thanks to the SCCC Culinary Arts and Hospitality Center for providing the venue.

AGENDA

8:30-9:00	Registration and networking breakfast	
9:00-10:20	OVERVIEW AND ENVIRONMENTAL NEED	
	Introduction	Glynis Berry, A.I.A, LEED AP, Chair, Planning Committee
	Environmental needs	Richard Balla, EPA Region 2
	Wastewater overview	Candace Balmer, Water Resource Specialist, RCAP Solutions
10:20-10:30	Break	
10:30-12:10	REGULATIONS and STANDARDS	
	New guidelines > 1000 gpd	Thomas Boekeloo, P. E., NYS DEC
	Suffolk County Wastewater Management Studies	Tanima Adhya, P.E. SC DOH Office of Wastewater Management
12:10- 1:00	LUNCH	Organization Announcements
1:00-3:00	ALTERNATIVE COMMUNITY SYSTEMS	
		Will Kirksey, P.E., Worrell Water Technologies Living Machine and how it works
		William Cagle, Orenco Systems, Inc. Community treatment of effluent and implementation strategies
		Pio S. Lombardo, P.E., Lombardo Associates, Inc. Community systems, nitrogen treatment
3:00-3:10	Break	
	Case Study: Hillsdale	Doug Clark, P.E., Clark Engineering + Surveying
	Land use planning	Bill Chaleff, A.I.A, LEED AP, Chaleff and Rogers, Architects
4:00: 5:00	PANEL DISCUSSION	Kevin McAllister, Peconic Baykeeper and All Speakers

BIO's of participants

New Solutions for Community Wastewater Treatment Symposium

Tanima Adhya, PE
Ms. Adhya is an Senior Public Health Engineer with the Suffolk County Department of Health's Office of Wastewater Management. Ms. Adhya started her career as a Fire Sprinkler System Design Engineer in 1995. She joined Suffolk County Department of Health Services in 1997 and has been working as a review engineer. Before becoming a major participant in the Department's Sewage Treatment Plant Program in 2003, she reviewed mostly commercial and subdivision applications involving conventional subsurface sewage disposal systems and water distribution systems. Since 2003, she has been reviewing major projects involving multi-unit development with on-site and/or off-site sewage treatment plants. She is currently overseeing various activities of the Sewage Treatment Plant Program. Tanima holds a BS in Physics from Indian University and a BE in Mechanical Engineering from SUNY at Stony Brook.

Richard Balla, EPA Region 2
Rick Balla is an environmental engineer with the U.S. Environmental Protection Agency. He works principally on issues impacting coasts and estuaries, and nonpoint source pollution management in New York State. He is EPA's coordinator for efforts in the Peconic Estuary, a Federally designated "Estuary of National Significance" under the Clean Water Act. Rick has been with EPA's New York City Office since 1984. He has a Bachelor of Science degree from Cornell University, where he studied agricultural engineering. A life-long New Yorker, he currently resides on Long Island in the Village of RockvilleCentre.

Candace Balmer, MS
Ms. Balmer joined RCAP Solutions in March 1997 after previous experience as Associate Director, Pollution Abatement Technology Program at Westchester Community College and as Project Engineer with Environmental Resources Management, Inc. (ERM). She has served on numerous advisory boards and task forces, including her role as Chair, NY Onsite Wastewater Training Network (OTN), Project Coordinator, Lower Esopus Watershed Partnership (LEWP), and a member, of the NYS DEC-sponsored Onsite Wastewater Treatment Workgroup. Her educational credentials include an A.A.S. Water Quality Monitoring, B.A. in Anthropology, and M.S. in Environmental Engineering. RCAP Solutions is a private non-profit organization, part of the national Rural Community Assistance Partnership. RCAP Solutions provides no-cost and low-cost technical assistance to small communities in the area of water and wastewater project planning and implementation.

Glynis M. Berry, AIA, LEED AP
Glynis worked at museums as an exhibit designer and director of a children's museum before becoming an architect, planner and urban designer. She holds a BA from Smith College and a Masters of Architecture from Yale University. A recipient of a Monbusho Scholarship, she studied and practiced architecture at the Tokyo Institute of Technology with Kazuo Shinohara. At NYC DOT, Glynis founded NYC's pedestrian and traffic calming programs, helped install a bicycle network, and, as Chief of Capital Planning, supervised the preliminary designs of street projects. Glynis has been a member of the USGBC's national code committee since its inception. She is currently Chair of the Planning Committee of the AIA Peconic Chapter. She has also sponsored exhibitions on work by environmental artists as part of *Art Sites*. As a partner in *studio a/b architects*, Glynis advocates designs that integrate issues of function, nature, environment, social equity and enriched human experience.

Thomas H. Boekeloo, PE

Tom has been an Environmental Engineer II at the New York State Department of Environmental Conservation since 1989. He now works in the Nonpoint Source and General Permits Section of the Division of Water, and has the lead for the OWTS Workgroup, a statewide workgroup for on-site wastewater created under the NYS Nonpoint Source Coordinating Committee. Tom developed the OWTS Nonpoint Source Management Catalog with assistance from NYSDOH, and revised the DEC Design Standards for Wastewater Treatment Systems for Intermediate-sized Facilities with assistance from NYSDEC Regional water staff. He currently serves as the Secretary for the Onsite Wastewater Treatment Training Network or OTN (www.otnny.org).

William (Bill) A. Cagle, REHS

Bill has been with Orenco Systems®, since 1998. He has served as Orenco's Government Relations Coordinator, as a Regional Account Manager, as Business Development Manager, and is currently the company's National Accounts Manager. Bill and his team focus on developing long-term relationships with the nation's largest corporations, to help them achieve the highest possible return on their investments in wastewater infrastructure. Bill earned a B.A.degree in biology from California State University, Sacramento in 1988. He then spent seven years with the Placer County (California) Environmental Health Department. In 1996, Bill was voted "REHS Of The Year" by the California Environmental Health Association for his dedication to the field of onsite wastewater treatment. Bill is a frequent presenter and trainer on numerous topics, including the cost differential of various community sewering technologies and the use of advanced controls for monitoring the performance of decentralized systems.

Bill Chaleff, AIA, LEED AP

A long time advocate of "Green" architecture, affordable housing and sustainable planning and design, Bill Chaleff has designed over 200 energy-efficient buildings since he began his practice on Long Island in 1974. These solar and underground structures have been built using state of the art construction methods and materials, and have integrated thermal system engineering with structural engineering and architectural design. Bill is the developer of air-floor construction, which has been integrated into over 150 buildings over a period of 30 years. His firm won a New York State engineering award for their Tuckahoe School addition. Bill has been guest lecturer at U.C. Berkeley and at R.I.S.D. and New York Tech Architectural Schools. He has also taught architecture at the Hampton Day School and was adjunct professor at L.I.U. Southampton. He has been retained by the Structural Insulated Panel industry and the A.I.A. to run several workshops across the country on construction with Structural Insulated Panels. Bill has also been active in working with his local Townships on affordable housing and planning issues so as to reduce our energy expenditures, strengthen community by increasing economic and cultural diversity, and regenerative restoration of the un-built landscape.

Douglas C. Clark, PE, LEED AP

As Vice President of Clark Engineering & Surveying, P.C., Doug is principal in charge of civil and environmental design projects. His involvement assures that quality standards are maintained from initial contact through project closeout. Doug provides extensive design experience in public and private water systems, public and private wastewater treatment systems, street reconstruction, solid waste landfills and composting, bridges, dams and hydropower, site development and subdivisions, regulatory reviews and permitting, environmental impact studies, planning and consultant to municipalities for review of environmental studies, site plans and subdivisions. Doug has a B.S. degree in Environmental Engineering (1977) and a M.S. degree in Ecological Economics from Rensselaer Polytechnic Institute (2009) and is an active member of numerous civil engineering and water related organizations.

William E. Kirksey, PE

Mr. Kirksey, a Senior Vice President of Worrell Water Technologies,has over 30 years of experience in environmental engineering, technology, and management with an emphasis in sustainable water and energy infrastructure. He leads operations for Worrell Water Technologies, a company offering a diversified suite of water and wastewater treatment technologies and services. A special focus at Worrell Water is advanced ecological wastewater treatment applied to integrate natural and human ecosystems.

Mr. Kirksey's prior experience includes senior management roles in the private sector, non-profit organizations, and government. Specific roles included Vice President and Senior Fellow with the American Society of Civil Engineers Research Foundation; Senior Policy Analyst in the Florida Governor's Office; and domestic and international consulting with Battelle, Price Waterhouse, and SAIC. His background includes international work experience in over a dozen countries in Asia, Europe, and Africa. In addition, he has written a wide variety of published guidebooks, technical manuals, and technology analyses. He is a frequent conference speaker, organizer, and facilitator; recently including the Sustainable Silicon Valley Water Summit, WaterSmart 2009, and the National Council on Science and the Environment's New Green Economy Conference. He has also prepared and presented recommendations and testimony to White House conferences, committees of the U.S. Congress, state legislatures, local government elected officials, and state public utility commissions. He is the co-inventor of small-scale, decentralized water treatment technologies. Mr. Kirksey has an M.S. in Environmental Systems Design from Southern Illinois University; and a B.S. in Civil Engineering from Tennessee Technological University. He is a Registered Professional Engineer in the State of Florida.

Pio Lombardo, PE

Pio Lombardo, PE, President of Lombardo Associates, Inc. (LAI) of Newton, MA, has 40 years of experience with innovative wastewater management and water reuse throughout the US. He has been the Engineer-of-Record for innovative decentralized wastewater and water reuse projects with capital costs greater than $200 million that are operating in numerous States, including many in NY. Mr. Lombardo has been a contributor to and co-authored more than six (6) EPA Manuals including Wetlands for Wastewater Treatment, On-site Treatment Manual and Cluster Wastewater Systems Planning Manual. He is considered a national expert on innovative decentralized wastewater management and passive nitrogen and phosphorus removal techniques. Pio has engineered a decentralized wastewater reuse system for commercial development in Malibu CA using passive techniques with total beneficial reuse of wastewater – resulting in no wastewater discharge. Pio was the Engineer of Record of a 900,000 gallons per day innovative wastewater treatment system using constructed wetlands for nutrient removal, 20+ cluster wastewater systems ranging in size from 2 to 200+ households, and over 200 individual conventional and advanced treatment on-site wastewater systems. His NitrexTM passive nitrogen removal technology was selected by Suffolk County for the LEED certified Scully Environmental Center in Islip. Pio was the recipient of the prestigious American Consulting Engineer's Council Engineering Excellence Award and an *Engineering News Record* Construction Man of the Year candidate. Pio has a MS in Environmental/Civil Engineering from the University of Washington and BS Chemical Engineering from the University of Massachusetts, cum laude.

Kevin McAllister

Kevin was selected in 1998 to serve as the Peconic Baykeeper, a position dedicated to safeguarding the ecological health of Long Island's Peconic and South Shore estuaries. Kevin has extensive academic and professional training in biological sciences and coastal zone management. His work involves patrolling the bays, monitoring water quality, identifying pollution problems, enforcing environmental protection laws and working with government officials and civic leaders to develop progressive conservation policies.