NAWTEC 12
North American Waste-to-Energy Conference

Savannah
Lights Up!

Savannah Marriott Riverfront
Savannah, Georgia
May 17-19, 2004

Presented by:

SWAN
INTERNATIONAL WASHERS' ASSOCIATION
ASME

In Partnership with:

WIERT
FEEL THE POWER

Join the NAWTEC sponsors — the Integrated Waste Services Association (IWSA), the American Society of Mechanical Engineers (ASME), and SWANA — The Solid Waste Association of North America and ENERGIZE yourself at the LEADING industry conference and trade show covering municipal waste-to-energy issues, combustion concepts, and emerging waste-conversion technologies.

2004 HIGHLIGHTS

- Three exceptional keynote speakers - Marianne Lamont Horinko, Assistant Administrator of U.S. EPA’s Office of Solid Waste and Emergency Response, (invited); John Miller, CEO of American Ref-Fuel Company, and Professor Jim Swithenback, Director of the Sheffield University Waste Incineration Centre
- Special “state of the practice” panel on incinerator ash recycling and current real-world approaches to encouraging the productive reuse of ash
- A look at dealing with and mitigating corrosion problems in combustion environments
- Trade show packed with vendors displaying the latest WTE technology, equipment, and services

FEATURED FACILITY TOUR

SAVANNAH RESOURCE RECOVERY FACILITY (SRRF)
operated by Montenay Savannah Operations, Inc.

Wednesday, May 19th, 12 Noon - 4:00 PM
(separate registration required, includes lunch)

Since 1987, SRRF has received and processed municipal solid waste from the City of Savannah and surrounding Chatham County. The facility incinerates collected refuse in two mass burn, refractory lined, waterwall tube, tumbling grate municipal waste combustors with a total capacity to process 500 tons/day. Combined, the units are capable of producing 124,660 pounds per hour of super-heated (750 degrees F. @ 650 psig) steam. Boiler outlet steam is used to feed a high-pressure steam turbine generator set and the power produced is used to offset plant power demands. Low-pressure exhaust steam from the turbine is made available to an offsite steam customer for production processes. The latest in emissions control technology is utilized at SRRF to remove particulates from the flue gas and maintain compliance with all state and Federal regulations.

Many thanks to the City of Savannah, Jay Howell (SRRF Facility Manager), and the entire staff of Montenay Savannah Operations, Inc. for their support of NAWTEC 12 and willingness to let NAWTEC attendees tour the plant.

Please Note: Buses will leave promptly from the hotel at the time indicated in the conference program. Plan for the tour to take the entire time allotted and please make travel arrangements accordingly. Casual attire is recommended and open-toed shoes, skirts, and shorts are NOT suggested. The tour will take place rain or shine. Personal vehicles will NOT be allowed onsite.
12th ANNUAL NORTH AMERICAN WASTE-TO-ENERGY CONFERENCE (NAWTEC 12)
May 17-19, 2004 • Savannah Marriott Riverfront • Savannah, Georgia

PLEASE COMPLETE OR REGISTER ONLINE AT WWW.SWANAstore.com

Name:  □ Mr. □ Mrs. □ Ms. ________________________________________ Nickname (for badge) ______________

Title ___________________________________ Organization _______________________________________________________________________

Address _____________________________________________________________________ City ______________________________________________

State/Province ________________________ Zip/Postal Code_________________________ Country __________________________________________

Phone (           ) ______________________ Fax (           ) ___________________________ e-mail ____________________________________________

☐ Please check here if you would like to order vegetarian meals or have any dietary or ADA needs. (attach specific information)

Method of Payment

Please read NAWTEC's Payment and Cancellation/Refund Policies below, select a payment method, and sign the Payment Acknowledgment below.

<table>
<thead>
<tr>
<th>Registration Options</th>
<th>Early Registration Before April 16</th>
<th>Registration After April 16</th>
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<tr>
<td>Technical Session Registration Fees (May 17-19)</td>
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<tr>
<td>Full Registration (Monday-Wednesday)</td>
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<td>Exhibits Viewing &amp; Welcome Reception ONLY*</td>
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*Does not include copy of NAWTEC Proceedings

☐ Tour (May 19) Savannah Resource Recovery Facility        | $40                               | $50                         |

☐ NAWTEC12 Golf Tournament (5/16)                          | $120                              | $120                        |

Proceedings included for full/govt. registration only      

TOTAL DUE $________

☐ My check for $ ____________ made out to SWANA/NAWTEC is enclosed.

☐ My P.O. number is ________________ (copy of P.O. must be attached)

☐ Charge to: ☐ Visa ☐ MasterCard ☐ Discover

☐ American Express ☐ Diners Club

Card #: ___________________ Exp. Date: ___________________

Signature: ___________________ Date: ___________________

PAYMENT POLICY: If you must process your payment through your organization, please submit your registration in advance and indicate payment to follow. Payment must be received prior to the start of the event to be admitted. SWANA, on behalf of NAWTEC, accepts cash, checks, money orders, American Express, Diners Club, Discover, MasterCard, and Visa for payment of all events. Purchase Orders for future invoicing will be accepted from individuals who have been members of the organization for at least 90 days and who have an account in good standing. A copy of all Purchase Orders must accompany the registration form.

CANCELLATION/REFUND POLICY: Cancellations for SWANA/NAWTEC meetings must be in writing. Phone cancellations will not be accepted. Refunds will be issued on the date of receipt of the written cancellation and will be issued as follows: 30 days or more prior to the start of the event, 100% refund of the registered conference amount less a $50.00 administration fee; (we will not issue refunds for tours and other special events offered during the conference.) Any cancellations received less than 30 days from start of the event will be eligible for a SWANA/NAWTEC future event meeting credit worth 50% of the registered conference amount, (not including tours and other special events offered during the conference.) This meeting credit can be used for any future SWANA/NAWTEC national event and is good for one (1) year from the date of issue. We invoice for no shows!!

PAYMENT ACKNOWLEDGEMENT: (REQUIRED) PLEASE SIGN AND DATE BELOW INDICATING THAT YOU HAVE READ AND UNDERSTAND THE PAYMENT AND REFUND POLICIES ABOVE. REGISTRATIONS WILL NOT BE PROCESSED WITHOUT SIGNATURE.

SIGNATURE: ___________________ DATE: ___________________
SUNDAY, MAY 16, 2004
1:00 pm Tee-Off 2nd Annual NAWTEC Golf Tournament
The Club at Savannah Harbor (separate registration)
3:00 pm - 5:00 pm NAWTEC Registration Open

MONDAY, MAY 17, 2004
8:00 am - 4:30 pm NAWTEC Registration Open
8:30 am - 9:30 am Continental Breakfast
9:30 am- 12 noon PLENARY SESSION—Welcome to Savannah & NAWTEC 12 Keynote Presentations
Opening Remarks & Presentation of 2004 NAWTEC Achievement Award
Maria Zannes, NAWTEC Steering Committee Chair & President, Integrated Waste Services Association (IWSA)

KEYNOTE PRESENTATIONS
9:40 am - 10:20 am Marianne Lamont Horinko, Asst. Administrator, U.S. EPA Office of Solid Waste and Emergency Response (invited)
10:20 am - 11:00 am John Miller, CEO, American Ref-Fuel Company
• Rhetoric Vs. Reality: Dispelling the Myths that Stop Industry Growth
11:00 am - 11:15 am Break
11:15 am - 12:00 noon Professor Jim Swithenback, Director, Sheffield University Waste Incineration Centre, UK
• SUWIC Innovations in Thermal Waste-to-Energy Technologies
12:00 noon - 1:30 pm Luncheon - ASME Solid Waste Processing Division 2004 Awards Ceremony

1:30 pm - 4:30 pm CONCURRENT TECHNICAL SESSIONS
Break from 3:00pm – 3:15pm

CORROSION MITIGATION
• Corrosion Mechanisms and Alloy Performance in Waste-to-Energy Combustion Environments
  George Lai, Consultant to Welding Services
• Field Experience with Weld Overlay Materials in Waste-to-Energy Plants
  Larry Paul, Technical Marketing Specialist, ThyssenKrupp VDM USA Inc.
• Superheater Life with Various Metal Alloys at the Maine Energy Recovery Company
  Ken Robbins, General Manager, Maine Energy Recovery Company
• Refractory Tile Installation - Mortar or No Mortar?
  Patrick Stephan, marketer, Saint-Gobain Ceramics
• Simulation and Validation of a Mass Burn WTE Boiler Using CFD Modeling
  Greg Epelbaum, Chief Engineer - Boiler Systems, American Ref-Fuel Company
• State of the Art of Thermal Spray Technology in the International Waste-to-Energy Industry
  Iain Hall, Director of Technology, Metalspray United

SPOTLIGHT ON AIR EMISSIONS AND ASH ISSUES
• Multiple Pathway Health Risk Assessments and Multimedia Environmental Monitoring Programs for a Municipal Waste Resource Recovery Facility in Maryland
  Ramana Rao, Engineering Services Specialist, Montgomery County Department of Public Works & Transportation - Division of Solid Waste Services
• An Update on EPA’s Initiatives Impacting Municipal Waste Combustors
  Walt Stevenson, U.S. EPA Office of Air Quality Planning and Standards, Emission Standards Division
• Accrediting Greenhouse Gas Credits for Market Trading - The Saugus Experience
  Frank Ferraro, Vice President, Wheelabrator Technologies Inc.
• Ash Recycling: Just a Dream?
  Heiner Zwahr, Managing Director, MVR Müllverwertung Rugenberger Damm GmbH & Co. KG, Hamburg, Germany
• A Toxicity Reduction Exercise for MSW Incineration Fly Ash Utilising Separation, Isolation and Treatment
  Daniel Robertson, Ph.D. Candidate, Faculty of Technology, Open University, UK

5:00 pm - 8:00 pm Opening of NAWTEC 12 Trade Show & Sponsors Welcoming Reception (Exhibits Open!)
TUESDAY, MAY 18, 2004

7:30 am - 4:30 pm NAWTEC Registration Open
8:00 am - 9:00 pm Continental Breakfast in Exhibit Hall (Exhibits Open!)

9:00 am - 12 noon CONCURRENT TECHNICAL SESSIONS
Break from 10:30am – 10:45pm

O&M: IMPROVEMENTS THAT MAKE A DIFFERENCE
• A New Air Compressor Cooling System for Pinellas County Resource Recovery Facility
  Tom W. White, Regional Engineer, Wheelabrator Technologies Inc.
• The Boiler Prism: 2 Years Later
  Dirk E. Eberle, Business Development Manager, Seghers Keppel Technology Inc., USA
• An Energy Audit That Saves Money
  Gary J. Dases, President, BRIL, Inc.
• Innovative High Pressure Boiler Cleaning Method Using a Rotary Cable Swivel Tool
  Dominick M. Arpa, Project Engineer, Montenay-Onyx Power Corp.
• How to Successfully Increase the Revenue of Waste-to-Energy for the Long-Term
  Francois Screve, Founder, Deltaway Energy, Inc.

NEW TECHNOLOGIES—A LOOK INTO THE FUTURE
• The Emergence of Conversion Technologies in California as a Viable Alternative to Landfilling
  Linda M. Oulton-Patterson, Chair, California Integrated Waste Management Board
• Next-Generation Waste-to-Energy: Will There Be One?
  Larry Beaumont, Vice President of Technologies, EnergyAnswers Corporation and General Manager, e/o/Tech, LLC
• The eco/Tech Sludge Recycling System: Two Years of Experience
  Edward Champagne, Project Manager Engineer, Eco/Tech, Inc.
• Thermoselect Gasification Technology: Waste-to-Energy and Recycling Operating Facilities and Future Projects
  Joseph Schilli, HDR Engineering, Inc.
• The Application, Technical Challenges and Problem Solving Approaches of Co-Incineration of Municipal Solid Waste and Industrial Waste in Mass Burn Waste-to-Energy Plants
  Abraham Shu, General Manager, Swire SITA Waste Services Limited, Taipei, Taiwan

NEW TECHNOLOGIES—A LOOK INTO THE FUTURE
• How to Successfully Increase the Revenue of Waste-to-Energy for the Long-Term
  Francois Screve, Founder, Deltaway Energy, Inc.

12 Noon - 2:00 pm Lunch in the Exhibit Hall (Exhibits Open!)

2:00 pm – 4:30 pm CONCURRENT TECHNICAL SESSIONS
Break from 3:30pm – 3:45pm

PRACTICAL APPLICATIONS FOR ASH REUSE
A PANEL DISCUSSION chaired by Andrew Lehman, Sr. Engr., Scientific and Bartilucci Consulting Engineers, will look at a topic of long-standing interest and importance—how can some or all of the ten percent (10%) by volume of incoming material that remains after municipal solid waste is combusted be productively reused?

 Speakers include:
• Robert Hauser, Jr. (Pinellas County)
• John Krueger (Pennsylvania Department of Environmental Protection)
• Nancy McCann (City of Tampa)
• Frank Roethel, Ph.D. (SUNY Stony Brook)
• Richard Tedder (Florida Department of Environmental Protection)

PLANT OPERATIONS & AIR POLLUTION CONTROLS
• Use of Multicomponent Infrared Gas Analyzers at Waste-to-Energy Facilities
  Ronald Baker, Vice President/Eastern Region, EcoChem Analytics
• 20 Economical Ways to Improve the Operation of a Waste-to-Energy Baghouse Dust Collector and Maximized Steam Production with Pleated Filter Elements and Acoustic Cleaners in an SDA System
  Robin Linton, Senior Sales Rep., BHA Group Inc.
• Improvement in Operating and Maintenance Costs with a Baghouse Conversion Using PTFE Membrane Filter Media
• Lime Usage Reduction at the Delaware Valley Resource Recovery Facility
  Stewart Nicolson, Founder and President, Primex Process Specialists

5:00 pm - 6:15 pm SWANA WTE Technical Division Meeting (open to all)
Evening Plans? Take a Ghost Tour of Savannah! Details Available at NAWTEC Registration Desk
Wednesday, May 19, 2004

7:30 am - 12:00 noon NAWTEC Registration Open
8:00 am - 9:00 am Continental Breakfast
9:00am - 11:45am CONCURRENT TECHNICAL SESSIONS
Break from 10:15am – 10:30pm

FACILITY CASE STUDIES
• The Savannah Waste-to-Energy Project
  Jim Osborn, Principal, Alternative Resources, Inc. and Gene Prevatt, Director of Refuse Disposal, City of Savannah
• 2003 Upgrades at the Greater Vancouver Regional District’s (GVRD) Waste-to-Energy Facility in Vancouver, Canada
  Chantal Babensee, Senior Project Engineer/Contracted Services, Greater Vancouver Regional District and Ron Richter, Plant Manager, Montenay Inc.
• Operational Upgrades and Planned Air Pollution Control Retrofit Project for the City of Key West, Southernmost Waste-to-Energy Facility
  Dan Shabat, Sr. Engineer, Dvirka and Bartilucci Consulting Engineers
• Making Lemonade from Lemons - Lessons Learned in Reducing the Economic and Environmental Impact and Negotiating the Post-2005 Service Agreements on Behalf of the 23 North East Solid Waste Committee Communities
  Shawn Worster, Executive Director, The North East Solid Waste Committee
• Replacement Operator for the Savannah Waste-to-Energy Facility
  Jay Howell, Facility Manager, Montenay Savannah Operations, Inc.

COLUMBIA UNIVERSITY WASTE-TO-ENERGY RESEARCH & TECHNOLOGY (WTERT) COUNCIL—Bi-Annual Session
• The Case for Waste-to-Energy as a Renewable Source of Energy
  Nicholas Themelis, Chair, WTERT Council and Director, Earth Engineering Center, Columbia University
• Novel Thermal Waste Treatment Technologies: Their Viability in North America Based on Experiences in Europe, Australasia and the Far East
  Alexander Klein, Techno-Economic Analyst, Juniper Consultancy Services, UK
• Waste-to-Energy Residues - The Search for Beneficial Uses
  Karsten Millrath, WTERT and Earth Engineering Center, Columbia University
• Combining Anaerobic Digestion and Waste-to-Energy
  Karena Ostrem, WTERT and Earth Engineering Center, Columbia University
• Effects of Feed Composition on Boiler Corrosion in Waste-to-Energy Plants
  Dionel Albina, WTERT and Earth Engineering Center, Columbia University
• Modeling of Solid Waste Flow and Mixing on the Traveling Grate of Waste-to-Energy Combustion Chambers
  Masato Nakamura, WTERT and Earth Engineering Center, Columbia University

12 Noon - 4:00 pm Facility Tour — Savannah Resource Recovery Facility (SRRF)
• Operated by Montenay Savannah Operations, Inc. (separate registration required, lunch included)

2nd Annual NAWTEC Golf Tournament
The Club at Savannah Harbor - Savannah, GA
Sunday, May 16th - Tee-Off @ 1:00 PM

Designed by Bob Cupp and Sam Snead and home to a PGA Champions Tour Stop, The Club at Savannah Harbor's course was recently named one of the "top 10 places to play in the United States for the millennium" by Golf & Travel Magazine.

Located across the river from the Marriott, greens fees are $120.00 (not including club rentals) for the tournament, sponsorship opportunities are available, and complete course information can be found online at www.theclubatsavannahharbor.com. For questions on the tournament or to inquire about sponsorship opportunities, please contact the 2004 Tournament Chair, Maria Zannes, at (202) 467-6240 or via email at zannesWTE@aol.com. Be sure to register early as space is limited!
HOTEL RESERVATIONS
For hotel reservations:
Savannah Marriott Riverfront
100 General McIntosh Blvd.
Savannah, GA 31401
Phone: (912) 233-7722
Fax: (912) 233-3765
Web: www.marriott.com
You may be required to include a deposit to guarantee your room. Please specify “late arrival” if you will be arriving after 4:00 pm. Rates are subject to rate and space availability. Please obtain verification if you cancel your reservation. If canceled prior to your date of arrival, a “no-show” fee may be assessed.

GENERAL EVENT INFORMATION
• All technical sessions and the trade show are held at the Savannah Marriott Riverfront.
• Continental breakfast, lunch, and breaks are provided for each day registered unless otherwise noted.
• No lunch is provided on Wednesday unless you have registered for the facility tour of SRRF.
• All registrations include admission to the NAWTEC Sponsors Welcoming Reception and Trade Show on Monday evening, May 17, 2004.

SAVANNAH — HOW TO GET THERE AND WHAT TO DO!
For information on the City of Savannah, including attractions, recreation, dining options, and much more, visit the Savannah CVB at www.savannah-visit.com.
For information on traveling to Savannah, visit the Savannah/Hilton Head International Airport online at www.savannahairport.com.

CONTINUING EDUCATION UNIT (CEU) INFORMATION
The total number of CEU’s available for each category of SWANA certification are:

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<th>Category</th>
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<td>Collection Systems</td>
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EXHIBITING & SPONSORSHIPS
Opportunities exist to not only exhibit at an industry-leading trade show, but to also place your company’s name in conjunction with sponsored conference events and giveaways that are sure to expand your business.
For more information on how you can position your organization in the spotlight, increase your name recognition, and effectively publicize your products and services, make sure to contact SWANA’s Exhbitions Department at 1-800-GO-SWANA (467-9262) ext. 238 today!

QUESTIONS?
Please contact SWANA’s Member Services Team at 1-800-GO-SWANA (467-9262) or visit the SWANA Store online at www.SWANAstore.com.