“At NAWTEC you get to talk with people who really know what’s going on in the waste-to-energy business. It’s your opportunity to learn from their experience as well as share your own knowledge.”

— Damon Taam, Spokane Regional Solid Waste System

18th Annual North American Waste-to-Energy Conference

May 11-13, 2010
MONDAY - MAY 10, 2010

3:00 PM – 7:00 PM  Registration Open
5:30 PM – 7:00 PM  Monday Night Meet n’ Greet at Sena Bar & Lounge

TUESDAY - MAY 11, 2010

8:00 AM – 4:30 PM  Registration Open
8:00 AM – 9:00 AM  Continental Breakfast
9:00 AM – 12:00 PM  Opening Remarks and Keynote Presentations
Opening Remarks
Ted Michaels, President, Energy Recovery Council

Keynote Presentations

Waste-to-Energy is Back and Better Than Ever
Mark Weidman, President, Wheelabrator Technologies Inc.

Building Bridges, Burning Trash
Robin Davidson, Executive Director, Northeast Maryland Waste Disposal Authority, Chair, U.S. Conference of Mayors’ Municipal Waste Management Association

Saving Resources and Protecting Climate: A Waste Policy Concept
Dr. Michael Weltzin, Scientific Assistant in the Parliamentary Group of Alliance 90 / The Greens in the German Bundestag

12:00 Noon – 1:30 PM  ASME Materials and Energy Recovery Division 2010 Awards Luncheon & Ceremony
1:30 PM – 4:30 PM  Concurrent Technical Sessions

SESSION 1: Contract Negotiations and Project Developments
Session Chair: Bob Hauser, Pinellas County Utilities, Fla.

Westchester WTE - What To Do After 25 Years
Joseph Krupa, Malcolm Pirnie, Inc.

Palm Beach County WTE Expansion Model
Thomas Henderson, Malcolm Pirnie, Inc.

There are Four R’s In Zero: Reduce, Reuse, Recycle and Recover- The Role of EFW in Durham’s Integrated Sustainable Waste Management System
Shawn Worster, HDR Engineering

2:30 PM – 3:00 PM  BREAK

The Olmsted County Expansion Project - Approach, Completion and Summary
Matthew Clark, Renewable Resource Consultants

Behind the Scenes: Historic Agreement to Develop U.S Virgin Islands First Alternative Energy
Robert Brickner, Gershman, Brickner and Bratton, Inc.

Developing A 21st Century Energy-from-Waste Facility in American Samoa
Marc Rogoff, SCS Engineers

SESSION 2: Concepts and Validation for Advancing WTE Technologies
Session hosted by
Session Chairs: Nickolas Themelis, Columbia University Zhixiao Zhang, Hangzhou Dianzi University

Industrial-Scale R&D in Challenging Times
Ralf Koralewska, MARTIN GmbH

High Efficiency Waste-to-Energy Power Plants: Combining Municipal Solid Waste and Natural Gas or Ethanol
Sergio Ribeiro, University of Brazil - Rio de Janeiro

Generating Renewable Electric Power and Reducing Carbon Footprint by Converting Low-Grade Heat to Electrical Energy
Adam Halsband, EISENMANN Corporation

2:30 PM – 3:00 PM  BREAK

A Risk Assessment Framework for Evaluating Health Risks from New and Emerging Waste Management Technologies
Stephen Zemba, Cambridge Environmental Inc.

Concepts and Experiences for Higher Plant Efficiency with Modern Advanced Boiler and Incineration Technology
Armin Main, Fisia Babcock Environment

Register Online at www.NAWTEC.org
SESSION 2: (continued)
Comparative Assessments of the Factors Influencing Waste Management Decisions in Selected Communities and the Environmental and Economic Impacts of those Decisions Using the EPA's MSW-DST
Jesse Miller, Environmental Protection Agency

Renewable Energy at a Sustainable Cost: Using a Combined Heat and Power WTE Facility
In The Paper Industry
Luc Ceyssens, Keppel Seghers Inc

SESSION 3: WTE's Role in Mitigating Climate Change
Session Chair: Mark White, Covanta Energy

Sustainability in Energy-from-Waste Plants: A Prevention and Conservation Challenge
Ram Tevari, Broward County, Fla.

Fishing for Energy Partnership Cleans up Marine Debris Pollution and Promotes Benefits of Recycling & Energy-from-Waste
Christine McCoy, Covanta Energy

Energy Recovery from Municipal Solid Waste in California: Needs and Challenges
Alexander Helou, City of Los Angeles, Bureau of Sanitation, Calif.

Measuring the Sustainable Return on Investment (SROI) Costs and Benefits of Waste-to-Energy
John Williams, HDR Engineering

10:30 AM – 11:00 AM BREAK

Energy Recovery Improvement Using Organic Rankine Cycles at Covanta’s Haverhill Facility
Heping Cui, Covanta Energy

John Norton, Norton Engineering

Potential for Energy-from-Waste Carbon Offsets in North America
Michael Van Brunt, Covanta Energy

Integrated Recycling Strategy at Waste-to-Energy Facilities
Hala Sfeir, Brown and Caldwell

SESSION 4: Advanced Air Emission Control Technologies
Session Chair: Sherman Patton, Malcolm Pirnie

2200 TPD RDF Facility with Advanced Boiler and Air Pollution Control Systems
Richard Abrams, Babcock Power

Comparison of Acid Gas Control Technologies in EFW Facilities
Craig Kedrowski, AE&E Von Roll

Emerging Technology for Multi-Pollutant Control on the Emissions of a Biomass Fired Boiler
Bradley Ginger, EISENMANN Corporation

10:30 AM – 11:00 AM BREAK

Dry Sorbent Injection of Sodium Sorbents for SO2, HCl and Mercury Mitigation
Yougen Kong, Solvay Chemicals Inc

Advancing WTE through Research and Technology Advanced Air Emissions Control
Anne Minga, Kuttner LLC

Energy-from-Waste and Dioxin Emission Control: Is There a Role for PVC Separation Programs?
Samuel Joshi, Covanta Energy

Thanks to Our Sponsor!
12:30 PM – 2:00 PM  
Lunch in the Exhibit Hall

2:00 PM – 4:30 PM  
Concurrent Technical Sessions

SESSION 5: Managing Corrosion and Boiler Reliability

Session Chair: Thomas M. White, Wheelabrator Technologies, Inc.

Advancements in Grate Cooling Technology  
Emily Owens, Wheelabrator Technologies

New Generation Of Tube Surface Treatments Help Improve EfW Boiler Reliability  
Greg Epelbaum, Covanta Energy

High Temperature Corrosion in a 24 MW Waste-to-Energy Plant  
Wenchao Ma, Tianjin University, China

DyNOR(TM) DeNOx Performance Confirmed in Further MSW Plants  
Peter Chromec, AE&E Von Roll

3:00 PM – 3:30 PM  BREAK

Fuel-Specific On-Load Boiler Cleaning Solutions in Waste Incineration Plants: Challenges, Concepts, Experiences  
Christian Mueller, Clyde Bergemann

Rear Ventilated Boiler Wall Protection  
Stephan Mulch, Juenger + Graeter GmbH

Fireside Corrosion Management in an RDF Fired Energy-from-Waste Boiler  
Stephen Vrchota, Great River Energy

SESSION 6: Research in the U.S. and China

Session hosted by  
Session Chairs: Eilhann Kwon, Columbia University  
Marco Castaldi, Columbia University

Ultrafine Particles from WTE and Other Combustion Sources  
Lital Yinon, Columbia University

Analysis of Thermal Plasma-Assisted WTE Processes  
Caroline Ducharme, Columbia University

Experimental Research on Microwave Induced Thermal Degradation of Waste Printed Circuit Boards  
Zhixiao Zhang, Hangzhou Dianzi University, China

Transforming Municipal Solid Waste into Fuel via the Gasification/Pyrolysis Process  
Eilhann Kwon, Columbia University

3:00 PM – 3:30 PM  BREAK

An Investigation into the Impact of CO2 Co-Feed to the Gasification / Pyrolysis  
Amy Knorpp, Columbia University

Waste Composition Studies: Impact on Resource Recovery  
Mark Bobman, BRRFOC

A Study on Performance and Emissions of a 4-Stroke IC Engine Operated on Methane with Carbon Dioxide  
Jechan Lee, Columbia University

Chlorine Sources, Sinks and Impacts in WTE Power Plants  
Nickolas Themelis, Columbia University

4:45 PM – 5:30 PM  
Legislative Update  
Ted Michaels, Energy Recovery Council  
Scott DuBoff, Local Government Coalition for Renewable Energy

This session will highlight the most recent federal legislative developments that will affect waste-to-energy.

5:30 PM – 6:00 PM  
SWANA Waste-to-Energy Technical Division Meeting (Open to All)

THURSDAY - MAY 13, 2010

8:00 AM – 12:00 Noon  
Registration Open

8:00 AM – 9:00 AM  
Continental Breakfast

9:00 AM – 11:30 AM  
Concurrent Technical Sessions

Register Online at www.NAWTEC.org
SESSION 7: Improvements for WTE Performance

Session Chair: Ted Michaels, Energy Recovery Council

Optimizing System Performance and Revenues from Metals Recovery Systems (MRS) at WTE Facilities
Thomas M. White, Wheelabrator Technologies

Recovery of Non-Ferrous Metals from a Municipal RDF Facility
Nathiel G. Egosi, RRT Design & Construction
Rob Weidner, City of Ames, Iowa

Twenty Year Operating History of Flue Gas Cleaning Systems at Three Municipal Waste Combustor Plants
K. Sampath Kumar, The Babcock & Wilcox Power Generation Group

10:00 AM – 10:30 AM BREAK

WTE Health and Safety Panel Discussion
Panel hosted by
This panel will highlight case studies of successful waste-to-energy facility health and safety programs and review the latest regulations impacting facility operations.

SESSION 8: Conversion Technologies

Session Chair: Joe Murdoch, HDR Engineering

Successful Procurement of Emerging Waste-to-Energy Technologies
Teno West, Pannone Lopes Devereaux & West LLC

Comprehensive Economic Feasibility Analysis of a Proposed Plasma Arc Gasification Waste-to-Energy Plant: The Marion, Iowa Experience
Bruce Clark, SCS Engineers

The Latest and Greatest on the Resurgence of Waste-to-Energy and Conversion Technologies
Harvey Gershman, Gershman, Brickner and Bratton, Inc.

10:00 AM – 10:30 AM BREAK

The Status Of Existing Biomass Gasification And Pyrolysis Facilities In North America
Theodore Pytlar, Dvirka and Bartilucci Consulting Engineers

Plasma Gasification: Lessons Learned
Shinichi Osada, Alter NRG Corp.

FACILITY TOUR

THURSDAY, MAY 13
12:00 Noon – 5:00 PM
(separate registration fee, includes lunch)

Covanta Lake, Inc. - Okahumpka, Fla.
The Lake County Resource Recovery Facility, located south of Leesburg in central Florida, began commercial operation in March 1991. The facility processes a total of 528 tons-per-day of solid waste while generating up to 14.5 megawatts of renewable energy that is sold to Florida Power Corporation.

For SWANA Continuing Education Unit (CEU) and ASME Professional Development Hour (PDH) information, please visit www.NAWTEC.org
EXHIBITOR AND SPONSOR INFORMATION

Interested in exhibiting or sponsoring at NAWTEC?
Contact Rich Ryan at exhibits@swana.org or 330.686.0353.

Current Exhibitors:

CDM
Covanta Energy
Dedicated Transport
Detroit Stoker Company
Gershman, Brickner & Bratton, Inc.
Ecochem Analytics
Firestone Specialty Products
Frontline BioEnergy
Hemlick Corp.
Innovative Equipment Solutions
J&G Refactories GmbH
Kennametal Conforma Clad
Mobile Dredging
Natural State Research
OMI Industries, Inc.
Plattco Corporation
Powerhouse Technology, Inc.
RRT Design & Construction
Saint-Gobain Ceramic Materials
Southern Recycling
Zampell Refractories, Inc.
18TH ANNUAL NORTH AMERICAN WASTE-TO-ENERGY CONFERENCE
May 11-13, 2010 – Orlando, FL • Register Online at www.NAWTEC.org

Name ____________________________________________ SWANA ID __________________________

Title ____________________________________________

Organization ____________________________________________

Billing Address ____________________________________________

City __________________________ State/Province _____________
Postal Code _____________ Country ____________________________

Phone Number ____________________________ Email ____________________________________________

- Please check here if you do NOT want your contact information included on the event participant list to be distributed at the conference
- Please check here if you are requesting vegetarian meals or have any dietary or ADA needs (attach specific information)
- Please check here if you have a different shipping or mailing address and attach the address(es) to this form.

Registration Options (all amounts in U.S. dollars)

*Please note member rates only apply to SWANA, ASME, and ERC members – YOU MUST provide your membership ID number (or Company Names for ERC members) in order to register at the member rates.

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<tr>
<th>Option</th>
<th>Member</th>
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<td>Full Registration (Tue. – Thu.)</td>
<td>$550</td>
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<tr>
<td>Government Full Registration (Tue. – Thu.)</td>
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<td>Tuesday Only (May 11th)</td>
<td>$265</td>
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<td>Wednesday Only (May 12th)</td>
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<td>Thursday Only (May 13th)</td>
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Early Registration
Through April 16th

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<th>Member</th>
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<td>Full Student Registration (NOTE: must submit proof of full-time status, meals must be purchased separately- please contact SWANA for pricing)</td>
<td>$50</td>
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<td>Welcoming Reception and Exhibition Only (Tuesday, May 11th)</td>
<td>$100 member/non-member</td>
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<td>Facility Tour – Thursday, May 13th, 12pm – 5pm (NOT included in registration fee)</td>
<td>$65 – Member</td>
<td>$75 – Non-Member</td>
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TOTAL DUE $______

Method of Payment

Please read SWANA/NAWTEC’s payment & cancellation/refund policies below, select a payment method, and sign the payment acknowledgement.

My check for $______ made out to SWANA 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: SWANA/NAWTEC accepts cash, checks, money orders, American Express, MasterCard, Discover, Diners Club, 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 as follows: 30 days or more prior to the start of the event, 100% of the registered conference amount less a $50 administration fee, (we will not issue refunds for tours or other special events offered during the conference). Any cancellation received less than 30 days from the 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) By signing this registration form, I acknowledge that I have read and accepted the payment and refund policies listed in this brochure. Furthermore, I understand that if I fail to appear that I, or my organization, will still be responsible for the total charges due.

Signature Required: __________________ Date: __________________

Please fax your completed registration form to SWANA at 240-645-1833.
18th Annual North American Waste-to-Energy Conference

May 11-13, 2010

Hilton Orlando
Bonnet Creek
Orlando, Florida

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