



AIR & WASTE MANAGEMENT
ASSOCIATION

FINAL PROGRAM



Air & Waste Management Association's

Harmonizing Greenhouse Gas Assessment and Reporting Processes

September 1- 2, 2009

Sheraton Inner Harbor Hotel

Baltimore, MD

In cooperation with:



ABOUT THE CONFERENCE

The reporting of accurate and consistent data is key to determining the success of climate action plans and mitigation measures. Industry experts will discuss advances in greenhouse gas (GHG) emission estimation methods, emission inventories, and reporting.

Harmonizing GHG Assessment and Reporting Processes will examine the convergence of mandatory and voluntary reporting initiatives, and emerging technical and policy issues. Don't miss this timely opportunity to examine methodologies for the characterization, calculation, and reporting of greenhouse gas emissions.

GENERAL INFORMATION

Registration

Registration will be located in the Chesapeake Gallery.

Registration Hours:

| | |
|-----------|-----------------------|
| Monday | 7:30 a.m. – 5:00 p.m. |
| Tuesday | 7:00 a.m. – 5:30 p.m. |
| Wednesday | 7:00 a.m. – 5:00 p.m. |

Sessions will be held in Chesapeake I & II.

Presenters' Breakfast

Presenters and Session Chairs are invited to meet for a complimentary continental breakfast on the day of their session involvement to review program details. Presenters should bring their presentations on a memory stick to this meeting. The breakfast will be held at 7:00 a.m. daily in the Severn I.

Continuing Education Credit Opportunities

Conference attendees may be eligible for continuing education credits (e.g. PDHs, CLEs) based upon their participation in conference events. A&WMA has been granted exempt status approval to be a Florida Board of Professional Engineers Continuing Education Provider (exempt provider #EXP 00079), and is an Accredited Provider of CLE in Pennsylvania (Provider #947).

Additionally, A&WMA can issue certificates to those interested in documenting continuing education and professional development hours. Please visit the on-site registration area to take advantage of these opportunities.

Conference Proceedings and Presentations

Conference papers and PowerPoint presentations will be available post-event. Attendees will be notified via e-mail when the papers and presentations are available.

Hotel Information

Sheraton Inner Harbor Hotel
300 South Charles Street
Baltimore, MD 21201

Phone: 410-962-8300 | Fax: 410-962-8211

Any messages and/or faxes should be delivered to the Air & Waste Management Association's registration desk.

Location and Transportation

The hotel is approximately 15 minutes from the Baltimore Washington International Airport. Shuttle service is available to and from the airport for approximately \$13/person one way (Super Shuttle; 410-859-0803). Taxi service is approximately \$30 one way. Parking is available at the hotel for \$23/day.

Conference Committee

General Conference Co-Chairs

Stan Hayes, *ENVIRON International Corp.*
Flint Webb, *SAIC*

Technical Conference Co-Chairs

Tom Driscoll, *U.S. EPA*
Miriam Lev-On, *The LEVON Group, LLC*

About the Air & Waste Management Association

A&WMA is a not-for-profit, nonpartisan professional organization that enhances knowledge and expertise by providing a neutral forum for technology exchange, professional development, networking, public education, and outreach to more than 8,000 environmental professionals in 65 countries. A&WMA also promotes global environmental responsibility and increases the effectiveness of organizations to make critical decisions that benefit society. For more information, please visit www.awma.org.

CONFERENCE SPONSORS

GOLD SPONSOR

ENVIRON

An international consultancy, ENVIRON works with clients to help resolve their most demanding environmental and human health issues, including those involving climate change and greenhouse gas reduction. We combine resources across geographic boundaries and technical and scientific disciplines to provide clients

with the best, most responsive team—whether responding to existing challenges, evaluating opportunities to improve performance, or seeking to reduce future liabilities. Clients around the world benefit from our unique ability to bring clarity to issues at the intersection of science, business and policy.

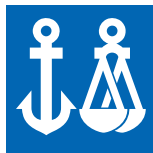


AMERICAN PETROLEUM INSTITUTE

The American Petroleum Institute Represents America's Oil and Natural Gas Industry. The oil and natural gas industry provides the fuel for American life, warming our homes, powering our businesses and giving us the mobility to enjoy this great land. As the primary trade association of that industry, API represents

nearly 400 members involved in all aspects of the oil and natural gas industry. Our association draws on the experience and expertise of our members and staff to support a strong industry. API is based in Washington, D.C., and has offices in 21 state capitals.

SILVER SPONSORS



DNV provides complete solutions for managing the risks and opportunities associated with GHG emissions and climate change. For more than a decade DNV has engaged in validation, verification and certification activities and services related to CDM/JI and voluntary emission reduction projects; verification of corporate emissions inventories; carbon neutrality; carbon

offsetting strategies; and strategic corporate positioning and risk management. DNV was the first entity accredited to certify GHG emission offset projects under the Kyoto Protocol to the UNFCCC, and has validated over 730 projects globally, or about 46% of the market. For more information on services in North America, please visit <http://climatechange.dnv.com>.



Engineering for Professionals

Johns Hopkins Engineering for Professionals (EP) offers part-time graduate degree and certificate programs that enable working professionals to increase and enhance their skills, knowledge, and value. EP offers programs in 15 distinct disciplines, including an advanced certificate program in climate change, energy, and environmental sustainability as well as a fully online master's

program in environmental planning and management. More than 2,000 working professionals enroll in EP programs at education centers in the Baltimore-Washington area and online. For more information, please call 1.800.548.3647, visit www.ep.jhu.edu, or email jhep@jhu.edu.

BRONZE SPONSOR



All4 Inc. is an environmental consulting firm that specializes in air quality. We assist our clients with air quality permitting; air quality compliance; air dispersion modeling; ambient, meteorological, and continuous monitoring; environmental program management; environmental regulatory analysis and climate change. Our clients industries are diverse; from power,

cement, refining and pulp & paper manufacturing to chemical, pharmaceuticals, food manufacturing, etc. Our clients are located in over 30 states and as diverse as their industries are, so is their size. We work with small single site operations to F500 multinationals with numerous facilities throughout the country. Visit www.all4inc.com for more information.

CONFERENCE PARTNER



FINAL AGENDA

Monday, August 31, 2009

- 7:30 a.m.-5:00 p.m. Course and Conference Registration
- 8:00 a.m.-12:00 p.m. Professional Development Course: AIR-128: Greenhouse Gas Emissions Management [ticket required; refer to registration form for fee] (Severn I)
- 1:00-5:00 p.m. Professional Development Course: AIR-129: Your GHG Program: Practical Considerations for Managing Greenhouse Gas Emissions in an Evolving Landscape [ticket required; refer to registration form for fee] (Severn I)

Tuesday, September 1, 2009

- 7:00 a.m.-5:30 p.m. Conference Registration (Chesapeake Gallery)
- 7:00-8:00 a.m. Presenters' Breakfast (Severn I)
- 7:00-8:00 a.m. Coffee Service (Chesapeake Gallery)
- 8:00-8:10 a.m. Welcome
Stan Hayes, *ENVIRON International Corp.* (Chesapeake I&II)
- 8:10-8:30 a.m. Maryland: State Perspective
Robert M. Summers, *Deputy Secretary, Maryland Department of the Environment* (Chesapeake I&II)
- Keynote Panel (Chesapeake I&II)
- 8:30-10:00 a.m. Data: The Foundation for a Greenhouse Gas Management Policy
Chair: Rick Sprott, *President A&WMA*
- Panelists:
Dina Kruger, *Director, Climate Change Division, Office of Air Programs, U.S. EPA*
Pamela Faggert, *VP and Chief Environmental Officer, Dominion Resources Inc*
Jill Gravender, *VP Policy, The Climate Registry*
David Hill, *Sidley Austin, LLP* (formerly General Counsel, U.S. DOE)
- 10:00-10:30 a.m. Refreshment Break (Chesapeake Gallery)
- Plenary Session (Chesapeake I&II)
Chair: Miriam Lev-On, *The LEVON Group, LLC*
- 10:30-11:00 a.m. IPCC Perspective on Data Quality for GHG Assessment
Bill Irving, *U.S. EPA* (US representative to the IPCC)

- 11:00-11:30 a.m. EPA Mandatory Greenhouse Gas Reporting Rule: Status and Implementation
Katherine Sibold, *Office of Atmospheric Programs, U.S. EPA*
- 11:30-11:50 a.m. Q&A with Audience
- 11:50 a.m.-1:00 p.m. Luncheon (Harborview Ballroom)
The ACES Act and the GHG Reporting Rule
William Bumpers, *Partner, Baker Botts, LLP*
- Session 1: Reporting Guidelines (Chesapeake I)
[concurrent with Session 2]
Chair: Miriam Lev-On, *The LEVON Group, LLC*
- 1:00-1:25 p.m. Abstract # 14
A Decade of Initiatives to Promote Consistent and Reliable GHG Emission Quantification
Karin Ritter, *American Petroleum Institute (API)*
- 1:25-1:50 p.m. Abstract # 1
Greenhouse Gas Emission Inventories for Major Chemical Plants for Reporting to CCAR and under California AB 32
Victoria Evans, *National Practice Leader-Greenhouse Gas Management*
- 1:50-2:15 p.m. Abstract # 40
Where's My Data? Estimating Facility GHG Emissions with Imperfect Information
Cody Taylor, *ICF International*
- 2:15-2:40 p.m. Abstract # 44
Harmonizing Indirect Carbon Emissions Calculations
Sarah Matheson, *GHD, Inc.*
- 2:40-3:10 p.m. Refreshment Break (Chesapeake Gallery)
- Session 2: GHG Emission Reduction Projects (Chesapeake II)
[concurrent with Session 1]
Chair: Stan Hayes, *ENVIRON International Corp.*
- 1:00-1:25 p.m. Abstract # 57
Asset vs. Liability: Translating GHG Data into Carbon Offset Projects
Marcus Krembs, *Element Markets LLC*
- 1:25-1:50 p.m. Abstract # 8
Issues in Developing a Greenhouse Gas Offsets Protocol for Tidal Wetland Restoration Projects
Jette Findsen, *Science Applications International Corporation (SAIC)*
- 1:50-2:15 p.m. Abstract # 12
SF6 Emissions Creating Carbon Offset Revenue
Brian Jones, *M. J. Bradley & Associates LLC*
and Bob Mueller, *Airgas Specialty Products*

FINAL AGENDA

2:15-2:40 p.m. Abstract # 18
Quantifying Offsets for Four Different
Afforestation Scenarios Using the Carbon
Budget Model of the Canadian Forest Sector
(CBM-CFS3)
Brian Simpson, *Canadian Forest Service*

2:40-3:10 p.m. Refreshment Break
(Chesapeake Gallery)

Session 3: Methodology (Chesapeake I) [concurrent with Session 4]

Chair: Flint Webb, *Science Applications International
Corporation (SAIC)*

3:10-3:35 p.m. Abstract # 37
Greenhouse Gas Estimation Methods for
Bus Fleet Upgrade Projects
Nancy Holt, *Science Applications International
Corporation (SAIC)*

3:35-4:00 p.m. Abstract # 33
Standardizing and Professionalizing GHG
Quantification
Valerie Madarasz, *CSA America Inc.*

4:00-4:25 p.m. Abstract # 17
Does an f-Factor Based CO₂ Monitoring System
Affect CO₂ Mass Emissions Reported for RGGI?
Eric Swisher, *All4 Inc.*

4:25-4:50 p.m. Abstract # 16
Landlord/Tenant Boundaries in GHG Emissions
Inventories
Casey Pierzchala, *The George Washington
University*

5:00-6:30 p.m. Reception
(Chesapeake III)

Session 4: Integrated GHG Emission Inventories (Chesapeake II) [concurrent with Session 3]

Chair: Tom Driscoll, *U.S. EPA*

3:10-3:35 p.m. Abstract # 45
Integrated GHG Emission Inventory for Housing
and Transport Sectors for the City of Mumbai
and Development of Mitigation Plan
Rakesh Kumar, *National Environment Engineering
Research Institute*

3:35-4:00 p.m. Abstract # 47
Air Pollution in Asian Countries and Climate
Change Interaction: Co-benefit Opportunity
Nguyen Thi Kim Oanh, *Environmental
Engineering and Management, SERD, Asian
Institute of Technology*

4:00-4:25 p.m. Abstract # 46
Multi-Pollutant Emissions Inventories and
Analysis for Key Industrial Sectors
Anne Pope, *U.S. Environmental Protection Agency*

4:25-4:50 p.m. Abstract # 53
Effects of the Global Economic Crisis in the
Emissions of Air Pollutants and
Environmental Policies in Mexico City
Violeta A. Mugica, *Universidad Autónoma
Metropolitana-Azcapotzalco*

5:00-6:30 p.m. Reception
(Chesapeake III)

Wednesday, September 2, 2009

7:00 a.m.-5:00 p.m. Conference Registration
(Chesapeake Gallery)

7:00-8:00 a.m. Presenters' Breakfast
(Severn I)

7:00-8:00 a.m. Coffee Service
(Chesapeake Gallery)

Session 5: State and Local Case Studies (Chesapeake I) [concurrent with Session 6]

Chair: Tom Driscoll, *U.S. EPA*

8:00-8:25 a.m. Abstract # 4
Greenhouse Gas Inventories of Baltimore
County and County Government 2002 – 2006
Patricia Brady, *PAB Environmental*

8:25-8:50 a.m. Abstract # 19
Pennsylvania Climate Change Action Plan
John Slade, *All4 Inc.*

8:50-9:15 a.m. Abstract # 36
Calculating Maryland State Government's
Environmental Footprint
Richard Norling, *Office for a Sustainable
Future, Maryland Department of Natural
Resources*

9:15-9:40 a.m. Abstract # 31
Development of an Integrated Criteria/Toxic
Air Pollutant and Greenhouse Gas Emissions
Inventory for Iowa
Stephen Roe, *E. H. Pechan & Associates, Inc.*

9:40-10:10 a.m. Refreshment Break
(Chesapeake Gallery)

Session 6: Facilities' Case Studies (Chesapeake II) [concurrent with Session 5]

Chair: Flint Webb, *Science Applications International
Corporation (SAIC)*

8:00-8:25 a.m. Abstract # 30
A Greenhouse Gas Accounting Protocol for
Federal Operations
Rob Hardison, *LMI*

FINAL AGENDA

8:25-8:50 a.m. Abstract # 39
Development and Application of an Air Force
GHG Estimation
Rahul Chettri, *Versar, Inc., GEOMET Division*

8:50-9:15 a.m. Abstract # 27
Estimating Institution-wide Personal
Occupancy Vehicle GHG Emissions: Two Case
Studies from the American Colleges and
Universities' President's Climate Commitment
Sean Williamson, *University of Maryland, Center
for Integrative Environmental Research*

9:15-9:40 a.m. Abstract # 35
Voluntary Greenhouse Gas Reporting in Higher
Education
Aniket Sawant, *O'Brien & Gere*

9:40-10:10 a.m. Refreshment Break
(Chesapeake Gallery)

Session 7: Emerging GHG Issues (Chesapeake I)

(concurrent with Session 8)

Chair: Stan Hayes, *ENVIRON International Corp.*

10:10-10:35 a.m. Abstract # 6
The Upcoming Canadian Offsets System:
Necessary Harmonization with a North-
American GHG Abatement Scheme
Florence Dagicour, *Fasken Martineau DuMoulin
LLP*, and Philippe Alary-Paquette, *Stabilis Inc.*

10:35-11:00 a.m. Abstract # 20
The Offset Debate: Exploring the Role of
Emission Reduction Projects within a Federal
Greenhouse Gas Emissions Cap & Trade Program
Lauren Wittig, *Camco International Group*

11:00-11:25 a.m. Abstract # 43
ANSI's Accreditation Program for Greenhouse
Gas Validation/Verification Bodies
Ann Bowles, *ANSI*

11:25-11:50 a.m. Abstract # 56
Measuring and Reducing GHG Emissions from
the Supply Chain: A Climate Leaders
Perspective
John Sottong, *Technical Director, U.S. EPA
Climate Leaders Program*

Session 8: Greenhouse Gas Inventory and Data Management

(concurrent with Session 7) (Chesapeake II)

Chair: Colin McCall, *All4 Inc.*

10:10-10:35 a.m. Abstract # 11
NASA GSFC: A Case of State Driven GHG
Inventory Development & Serendipity
Kathleen Moxley, *NASA Goddard Space Flight
Center (GSFC)*

10:35-11:00 a.m. Abstract # 10
New Developments in Product Carbon
Footprinting: Protocols and Applications
Ramsay Huntley, *ENVIRON International Corp.*

11:00-11:25a.m. Abstract # 51
Routine Air Emissions Databases and
Greenhouse Gas Reporting
James H. Southerland, *QEP, North Carolina
Division of Air Quality (retired)*

11:25-11:50 a.m. Abstract # 26
C-Lock Technology, Inc. GHG Measurement
Methodology
Robert Scott Zimmerman, *C-Lock
Technology, Inc*

11:50 a.m.-1:00 p.m. Luncheon (Haborview Ballroom)
Greenhouse Gas Emissions Issues
Jean Sweeney, *Vice President, EHS Operations,
3M Company*

Session 9: Special Presentations (Chesapeake I&II)

Chair: Miriam Lev-On, *The LEVON Group, LLC*

1:00-1:25 p.m. Abstract # 34
Stakeholder Preferences for Climate
Change Policy
Mary Greene, *George Mason University*

1:25-1:50 p.m. Abstract # 52
Bottom Up Measurement Methodologies of
GHG from Fugitive and Area Sources to
Support Reporting Requirements
Ram Hashmonay, *ENVIRON International Corp.*

1:50-2:15 p.m. Abstract # 38
How Reliable are GHG Combustion
Calculations and Emission Factors?
Scott Evans, *Clean Air Engineering*

Panel Session

(Chesapeake I&II)

2:15-3:30 p.m. Towards Harmonizing Data Reporting
Chair: Tom Driscoll, *Measurement Policy
Group, Office of Air Quality and Standards,
U.S. EPA*

Panelists:

Jan Jarrett, *President & CEO, PennFuture*
Richard (Chet) Wayland, *Director, Air Quality
Assessment Division, Office of Air Quality
Planning and Standards, U.S. EPA*
Mitch West, *Executive Coordinator, National
Environmental Information Exchange
Network*
Leslie Ritts, *Executive Director, National
Environmental Development Association/
Clean Air Project (NEDA/CAP)*

FINAL AGENDA

3:30-3:45 p.m.

Refreshment Break
(Chesapeake Gallery)

Panel Session

(Chesapeake I&II)

3:45-5:00 p.m.

The Triple Challenge – High Quality Data,
Harmonized Reporting, Minimizing Burden
Chair: Rick Sprott, *President A&WMA*

Panelists:

Peter Tsirigotis, *Director, Sectors Policies and
Programs Division, Office of Air Quality
Planning and Standards, U.S. EPA*

Karin Ritter, *Manager, Regulatory and
Scientific Affairs, American Petroleum
Institute*

Jette Findsen, *Science Applications International
Corporation (SAIC)*

5:00 p.m.

Adjourn

