# 15<sup>th</sup> Annual LMOP Conference and Project Expo Summary

- Welcome and Conference Overview Swarupa Ganguli, Landfill Methane Outreach Program (LMOP), U.S. Environmental Protection Agency (EPA)
- *Keynote Address* David H. Mauney IV, Energy Developments, Inc.

### Session 1: What's New in '11 – Direct Use, High BTU

- Hospital Beneficial Use of LFG- Rockingham County, VA Darrin Dillah, SCS Engineers; Warren Heidt, Director of Public Works, Rockingham County
- New Beneficial Use of LFG Animal Incinerator
  Tom Smith and Sadhu Sandhu, Prince William County
- High BTU and the Billings Montana Landfill
  Michael Mitariten, Guild Associates Inc.
- *DeKalb County LFG to RNG and Utilizing it for CNG Fuel in Solid Waste Vehicles* Billy Malone, DeKalb County

#### Session 2: What's New in '11- Electricity

- Integrated Utility Improvement Project Gas to Energy Plant and Compressor Building Douglas G. Tholo, HR Green
- Mississippi's First Landfill Gas to Electric Power Development- How a Public Entity Took Control and Made it Happen, A Lesson in Self Development Jimmy Sloan, Golden Triangle Regional Solid Waste Management Authority
- Equipment Considerations for LFG Gensets, Determining the Total Cost of Ownership Mauricio A. Lopez and Ben Mathews, Caterpillar Electric Power-Gas

#### Lunch

• 2011 LMOP Partner and Project of the Year Awards Luncheon

#### Session 3: Financing and Market Outlook

- Wholesale Power Markets, Risks and Rewards of Merchant Generation Gabriel Phillips, CEO of GP Renewables & Trading
- The Changing Landscape of Methane: Where Are Natural Gas Prices Headed David M. Tucker, Atmos Energy
- Tax and Non-Tax Incentives for Landfill Gas to Energy Projects Laura Jones, Hunton and Williams
- IFC Mechanisms for Participating in and Mobilizing Capital for the Solid Waste Sector in Emerging Markets
  - Jim Michelsen, International Finance Corporation

#### Session 4: Overcoming Technical and Regulatory Challenges

• Hydrogen Sulfide Remediation at King George County Landfill, King George, VA William Tennant, Waste Management

- *Real Time Siloxane Measurements at Landfill and Digester Sites Using FTIR* Barbara Marshik, MKS Instruments
- *Regulatory Compliance and Your Landfill Gas to Energy Project* Keith A. Johnson, BAS

## Session 5: Small Scale LFGE

- Small LFG-to-Pipeline as an Economic Development Driver in Rural Virginia Ed Rogers, Clean Energy Research & Development Center
- EnergyXchange: The World's First Small-Scale Art and Horticulture Based LFG Project: Still in Business
  After 12 Years
  Chad Lotherwood, SCS Engineers
  - Chad Leatherwood, SCS Engineers
- Facilitating Community Based LFG Statewide: 6 Years, 14 Counties, and 10 Projects Jason W. Hoyle, Appalachian Energy Center

# Session 6a: Round Robin of Technical Issues #1

- Evaluating Landfill Gas Collection Efficiency Uncertainty H.R. Amini and D.R. Reinhart, University of Central Florida
- CALMIM: A Field-Validated Model for Annual Site-Specific Landfill Methane Emissions Meg Corcoran, University of Illinois
- Challenges and Opportunities of Biomethane for Pipeline Injection in California "A Utility Perspective" Valentino M. Tiangco, Ph.D., SMUD

## Session 6b: Round Robin of Technical Issues #2

- Increasing LFG Collection Rates Using Gas Well Dewatering Systems- Lessons Learned David Kaminski, QED
- Converting LFGTE Projects to Combined Heat and Power Cycles Terry Beasy, Heartland Technology Partners, LLC
- LMOP Locator Training Amy Alexander, ERG

## Session 7: Financial Engineering's the Key: How a Long-Term Energy Sale Agreement and Bond Offering Transformed the McCommas Bluff LFGE Project. Three Perspectives on One Project

- Doug Lamb, McGuire Woods
- Evan Williams, Cambrian Energy
- Lawrence N. Tonomura, Bank of America Merrill Lynch

# Session 8: Where are They Now?

- Integrating Co-Generation for Renewable Fuel Production at the Catawba County North Carolina
  EcoComplex
  - Jeffrey E. Ramsdell, Jeremy Ferrell, and Zack Hobbs, Appalachian State University
- Lessons Learned in Developing and Operating a Small LFG to BioCNG Vehicle Fuel Project Mark Torresani, Cornerstone
- Follow Up on Keene, NH LFG Project David E. Adams, Sanborn Head