

**North Carolina Department of Environment and Natural Resources,
Division of Air Quality
Mercury/CO₂ Workshop Agenda
April 19 – 21, 2004**

Monday, April 19

Introduction and Welcome

Keith Overcash, Director, NC Division of Air Quality, DENR

Background and Significance of Clean Smokestacks Act

Brock Nicholson, Deputy Director, NC Division of Air Quality, DENR

Purpose and Charge for this Workshop, Logistics, etc.

Jim Southerland, Environmental Engineer, NC Division of Air Quality, Planning Section

Basis for Issues to be Discussed: CO₂ and Mercury

Moderator, Sheila Holman, Planning Chief, NC Division of Air Quality

Review of the Science and Concerns for Climate Change in North Carolina

Ryan Boyles, Associate State Climatologist, State Climate Office of NC at NCSU

History and Transitions of the Global Warming Program and Policies in the US

Wiley Barbour, Environmental Resources Trust

Development, Components and Status of the NC State Energy Plan

Larry Shirley, Director, NC State Energy Office, NC Department of Administration

Health Effects of Methylmercury and North Carolina's Advice on Eating Fish

Dr. Luanne Williams, Toxicologist, NC Department of Health and Human Services

Recent NC Water Quality Mercury Monitoring Results

Michelle Woolfork, Water Quality Engineer, NC Division of Water Quality

Update on DAQ's Air Quality Measurements and Mercury Studies

Steve Schliesser and Todd Crawford, Toxic Protection Branch, NC Division of Air Quality

Lunch Speaker - Importance and Impacts of CSA Sections 12 and 13 and Your Input for the Future of North Carolina

Secretary William (Bill) Ross, NC Department of Environmental and Natural Resources

General Mercury Topics and Issues Session (Hg-1)

Moderator, Michael Abraczynski, Environmental Engineer/Meteorologist, NC Division of Air Quality

Voluntary Mercury Reductions: NC Champions

Norma Murphy, NC Division of Pollution Prevention (P2), DENR

State of Science/Ability to Measure Mercury in Smokestack Environments

Barrett Parker, USEPA

Developing a Tool for Estimating Mercury Emissions and Reductions from Coal-Fired Utilities

Jeff Cole and C. Clark Allen, RTI International

Atmospheric Modeling and Deposition of Mercury from Stack to Sounds and other Water Bodies

O. Russell Bullock, Jr., Meteorologist, NOAA Air Resources Laboratory (on assignment to the EPA Office of Research and Development)

Historical Scientific Examination of Mercury Deposition to the Florida Everglades over the Past 100 Years or Atmospheric Mercury; Pandora's Box Revisited

Dr. Thomas D. Atkeson, FI DEP, Tallahassee, FL, Robert K. Stevens, FL DEP (at US EPA, RTP, NC), and Matthew S. Landis, US EPA, RTP, NC

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Tuesday, April 20

NC Specific Mercury Topics and Issues – Session 2 – (Hg-2)

Moderator, Steve Schliesser, Senior Environmental Engineer, NC Division of Air Quality

**USEPA's Proposed Mercury MACT and Alternate Proposals for Mercury Reduction Trading Options
A Summary of Options and Schedule for Comments and Final Regulations**

Bill Maxwell and Dr. Bob Wayland, USEPA

Performance and Costs of Mercury Control Technology for Bituminous Coals

Dr. Michael Durham, President, ADA Environmental Solutions

**Achieving CSA System-wide Reductions in (NO_x & SO₂) Emissions at Duke Energy Facilities and
Reactions to Achieving EPA's MACT/Trading Proposals for Mercury (Including limited comments on
options for new technologies, etc.)**

Robert A. McMurry, Duke Energy

**Achieving CSA System-wide Reductions in (NO_x & SO₂) Emissions at Progress Energy Facilities and
Reactions to Achieving EPA's MACT/Trading Proposals for Mercury**

Ben White, Progress Energy

**Estimated Emission Reductions in NC from Co-control as a Result of CSA, Using EPA Tool to
Estimate NC Coal-Fired Power Plant Mercury Emissions**

Steve Schliesser & Paul Grable, Environmental Engineers, NC Division of Air Quality

**Developing Policy Options That Can Result in Integration of CO₂ and Mercury Reductions and State
Implementation Plan Credits**

Alden Hathaway, Environmental Resources Trust, Inc., Washington, DC

Lunch Speakers – Mercury and CO₂ Emissions from the Power Generation Sector

**Dr. C.V. Mathai, Manager for Environmental Policy, Arizona Public Service Company, Phoenix, AZ
Insights from Economic Analyses of the Impacts to the Utility Industry from Mercury and CO₂
Controls**

Dr. Anne E. Smith, Vice President, Charles River Associates, Washington, DC

Mercury Reduction Programs in Other States

Martha Keating, Air Toxics Scientist, Clean Air Task Force

General CO₂ Topics and Issues (CO₂ – 1)

Moderator, Phil Besesi, Project Manager, NC State Energy Office

**Potential Impacts for the NC State Energy Plan on Emissions of CO₂ with Technical Procedures and
Assumptions Upon Which These Plans Were Developed**

Jeff Tiller, Appalachian State University

Technology, Energy Efficiency, and Renewable Energy for Emission Reduction

Ward Lenz, Director, Energy Programs and John Morrison, Vice President, Advanced Energy

**The People, the Planet, and the Pocketbook: How a Green Builder Program Can Avoid Emissions
Using Solar Energy**

Dona Stankus, AIA, NC Solar Center

Potential in NC for Extraction of Wind Energy

Dr. Dennis Scanlin, Professor, Technology Department, Appalachian State University

Past, Present and Projected Participation in Climate Wise by North Carolina Companies

James Haven, Global Warming Initiatives, Inc.

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Wednesday, April 21

NC Specific CO₂ Topics and Issues – Session (CO₂-2)

Moderator, Phyllis D. Jones, NC Division of Air Quality

Review of Real/Practical and Projected Options fro CO₂ at a Coal-Fired Generating Unit

Kevin Johnson, URS

Integrated Gasification Combined Cycle (IGCC) Technology; Carbon Sequestration and Cost Implications

Joe Chaisson, (Harpwell, ME), Clean Air Task Force (Boston, MA)

Forestry and Agriculture as Real Options to Increase Carbon Sequestration in Vegetation and Soils

Dr. William H. Schlesinger, Dean, The Nicholas School of the Environment & Earth Sciences, Duke University.

NC Animal Waste as a Potential Resource for Reducing CO₂ and Methane Emissions

Kurt Creamer P.E., Animal and Poultry Waste Management Center, NC State University

Industry Experience in Reducing CO₂ and GHG Emissions – A Case Study of International Proportions

Bill Bailey, DuPont, Charlotte, NC

What Other States Are Doing or Considering Regarding Reductions of CO₂ From Coal-Fired Utilities – With an Update from Milan and Introduction to STAPPA/ALAPCO's Software

Amy Royden, STAPPA/ALAPCO

Lunch speaker – Herding Sheep: The Commons and the Marketplace

Michael Shore, Environmental Defense

Overview of the Southeast Regional Carbon Sequestration Partnership

Gerald R. Hill, Ph.D, Senior Technical Advisor, Southeastern Regional Carbon Sequestration Partnership

Rate Implications Due to Mercury Reductions

Elise Cox, Assistant Director, Public Staff, NC Utilities Commission

Closing Comments by Keith Overcash, Director, NC DAQ