

Final Program
11th Annual Emission Inventory Conference:

Emission Inventories- Partnering for the Future



Courses: April 15, 2002
Conference: April 16-18, 2002
Hyatt Regency - Atlanta, GA

Sponsored by:



U. S. Environmental Protection Agency
Office of Air Quality Planning & Standards
Emission Factor and Inventory Group

Hosted by:
US EPA Region IV, and
Georgia Department of Natural Resources

General Information

Conference Overview

"**Emission Inventories - Partnering for the Future**" is the eleventh in a series of annual conferences targeted at professionals from federal/state/local and international regulatory agencies, tribal governments, industry, and academia who prepare, review, or utilize emission inventory data. The conference begins April 15 with a day of training courses covering several aspects of emission inventory preparation and use. The technical program, April 16 -18, includes presentations that describe new developments in methodologies for characterizing and inventorying air pollutant emissions, especially in emerging programs such as air toxics, fine particulate matter, and greenhouse gases. Also of interest are a number of poster presentations to be held in conjunction with an informal reception April 16. Several exhibit booths will be on display.

This conference is sponsored by the U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emission Factor and Inventory Group, with assistance from the EPA Region IV office and the Georgia Department of Environmental Protection. At the conclusion of the conference on Thursday, the Georgia DEP is coordinating a tour of the Georgia Power facility.

Keynote Speaker - Emission's Inventories: A Key in Regional Air Quality Planning

John Hornback is the Executive Director of Metro 4 and SESARM, two non-profit organizations that represent local and state air pollution control agencies in the Southeast. He is also the director of VISTAS, the planning organization addressing regional haze in the southeast.

John recently retired as director of the Kentucky Division for Air Quality, a position he had held since 1992. Primary accomplishments during his tenure as director were establishing staffing and other resources necessary to implement the Clean Air Act Amendments of 1990, attainment of the 1-hour ozone standard throughout the state, and forging relationships between citizens and businesses in Kentucky. He was a key supporter of major reevaluation and reengineering of the way the environmental agencies conduct their business.

John is a graduate of Eastern Kentucky University with a B.S. in Biology and an area of emphasis in wildlife management. He is married and has two sons who are sophomores – one at the University of Kentucky and the other in high school. His family will join him in Atlanta at the end of the spring school term.

In his spare time, John has served the youth of his community as a soccer referee, his church as treasurer, and he has taken photographs of more than 175 covered bridges across the country.

General Information

Exhibition

An exhibition of relevant organizations and activities complements the conference.

A reception will be held in conjunction with poster presentations in the exhibition area during the times designated in the program (see complete schedule). Exhibitors include:

US EPA/Emission Inventory Improvement Program

E.H. Pechan and Associates

S Pacific Environmental Services

MCNC Environmental Modeling Center

Speakers' Meetings

Presenters of papers and session chairs should meet at 7:00 a.m. in the Hong Kong room the morning of their session to make final arrangements for their presentation. This will be an opportunity to meet face-to-face, review bio's, ensure pc slides or overhead transparencies are working properly, and to review the schedule for the day.

Incoming Messages

Messages may be received at (404) 588-2950. Messages will be posted on the message board at the registration desk.

Conference Proceedings

Just prior to the conference, technical papers, and slide presentations where available, will be posted on the ClearingHouse for Emission Inventories and Factors (CHIEF) web site under the heading of Conferences. The address is www.epa.gov/ttn/chief. In order to minimize resources, paper copies of the conference proceedings will not be mailed to attendees. Papers that were submitted past the March 15 deadline may not be posted until shortly after the close of the conference.



Schedule at a Glance

Time	Session	Time	Session
Mon, Apr 15		8:00 - 10:00	Session 9a - Tribal Issues
8:00 - 5:00	Courses (See Training Schedule)	10:00 - 10:30	Break
Tue, Apr 16		Wed, Apr 17	
8:00 - 9:00	Plenary Session- John Hornback, SESARM - Keynote Speaker	10:30 - 12:00	Session 7- Stationary Source Methodologies
9:00 - 10:00	Demonstration of EPA's National Emission Inventory		Session 8 - RPOs (Continues)
10:00 - 10:30	Break		Session 9b-Mobile Sources
10:30 - 12:00	Session 1 - State Experiences with Point Source Emission Inventories	12:00 - 1:00	Lunch (On Your Own)
	Session 2 - Emission Factors	1:00 - 3:00	Session 10 - Emission Inventory Preparation for Modeling
	Session 3 - Fugitive Dust		Session 11 - Inventory Validation/QA
12:00 - 1:00	Lunch (On Your Own)		Session 9b - Mobile (Cont'd)
1:00 - 3:00	Session 4 - PM/Managed Burning	3:00 - 3:30	Break
	Session 5 - Data Management	3:30 - 5:30	Session 10 - Modeling (Cont'd)
	Session 6 - Greenhouse Gas		Session 11 Inv Val/QA (Cont'd)
3:00 - 3:30	Break		Session 9b -Mobile (Cont'd)
3:30 - 5:30	Session 4 - PM/Managed Burning (Cont'd)	Thu, Apr 18	
	Session 5 - Data Management (Cont'd)	8:00 -10:00	Session 12 - NH ₃ /Agricultural Issues
	Session 6 - Greenhouse Gas (Cont'd)		Session 13 - Toxics
6:00 - 8:00	Poster Session and Exhibitors Reception	10:00 - 10:30	Break
Wed, Apr 17		10:30 - 11:00	Session 12 - NH ₃ /Ag Issues (Cont'd)
8:00 - 10:00	Session 7 - Stationary Source Methodologies		Session 13 - Toxics (Cont'd)
	Session 8 - Planning Org Activities		

Training Schedule - Morning Session (8:00 am - 12:00 pm)

April 15, 2002

Courses will be offered, free of charge, on a first come, first serve basis. Pre-registration is required. Registered participants will be notified of class locations upon check-in.

EPA's Emission Estimation Tools

Location: U. S. EPA, Region IV Offices

Instructors: Dennis Beauregard, David Misenheimer, Bill Kuykendal, U.S. EPA

This course will introduce participants to the use of several of EPA's emission estimation tools and hands-on training for Air CHIEF Version 9.0; FIRE; TANKS; PM Calculator; the CHIEF website and Air DATA.

Basic Emission Inventory Preparation

Room: Hong Kong

Instructor: Roy Huntley, Doug Solomon, U.S. EPA

This course presents an introduction and broad overview of Emission Inventories. Topics covered include basic emission inventory concepts, planning for an emission inventory, and emission inventory quality assurance. The course also includes an introduction to developing emission estimates for different source types (e.g., stationary point sources, stationary area sources, onroad mobile sources, and nonroad mobile sources). This course is designed primarily for air quality agency staff that are new to the emission inventory field.

National Emission Inventory (NEI) Input Format (NIF)

Room: Montreal/Vancouver

Instructor: Lee Tooty, U.S. EPA

Most of the State/local and tribal agencies will use the NIF to transfer data electronically to EPA. A thorough review of NIF Ver 2.0 user package will be provided.

Implementation conventions will be demonstrated by reviewing a data set in the NIF Ver 2.0. The course is intended for State/Local/Tribal users.

Emission Inventory Preparation for Modeling

Room: Cairo

Instructor: Gregory Stella, U.S. EPA

Emissions modeling is an important and integral step in the translation of mass emissions inventories into useful inputs for air quality analysis and air dispersion model runs. This training session will provide a background into the development of emissions inventories suitable for emissions modeling and an outline of the steps and stages involved with emissions modeling activities. Key topics of discussion will be the completeness, temporal and spatial allocation, and speciation of mass emission inventories.

EPA's Emission Estimation Tools

Location: U. S. EPA Region IV Office

Instructors: Dennis Beauregard, David Misenheimer, Bill Kuykendal, U.S. EPA

This course will introduce participants to the use of several of EPA's emission estimation tools and hands-on training for Air CHIEF Version 9.0; FIRE; TANKS; PM Calculator; the CHIEF website and Air DATA.

Emission Inventory Quality Assurance

Room: Hong Kong

Instructor: Rhonda Thompson, U.S. EPA

With the evolution of the National Emission Inventory (NEI), U. S. EPA has developed a new quality assurance tool to identify potential errors in the inventory. Learn how to use this new software which automates checks for database format and content using the NEI Input format. It reads the submittal form accompanying the database and compares the database pollutant, geographic, SCC, and temporal coverage with the coverage specified. Other database format checks include completeness of mandatory fields and relational database referential integrity. It also performs database content checks on computational fields, acceptable codes, and numeric value ranges.

PM Fine Emission Inventory Preparation

Room: Cairo

Instructor: Tom Pace, U.S. EPA

This course will focus on the principal stationary source categories emitting PM fine particles. For each category, we will discuss how the National Emission Inventory (NEI) develops its emission estimates, suggest activities States can do to improve upon the NEI estimate and locate on-line resources to facilitate State inventory improvement activities. A case study will provide examples.

Inventory Preparation for Toxics

Room: Montreal/Vancouver

Instructor: Stephanie Finn, Eastern Research Group; Anne Pope, US EPA

This course discusses specific toxics issues to consider when developing toxics air emission inventories. It is designed as a segment to be used as a follow-on to the basic emission inventory course. It does not cover material on basic emission inventory development. Specific topics include how to report hazardous air pollutant compound groups, source categorization.

Tuesday, April 16, 2002

Session 1 State Experiences with Point Source Inventories Room: Montreal/Vancouver
Chairs: Roy Huntley, U. S. EPA
Robert Betterton, South Carolina, DHEC

10:30 am *West Virginia Point Source Emission Inventory - Two Steps Forward, One Step Back*, J. E. Morgan, D. J. Porter, West Virginia Division of Air Quality.

11:00 am *New York State's Point Source Inventory Merging Criteria and Hazardous Air Pollutant Inventories*, R. G. Sliwinski, M. P. Sheehan, R. D. Bielawa, New York State Dept of Environmental Conservation.

11:30 am *Virginia's Point Source Inventory System Experience - Transition from AFS to CEDS*, T. Ballou, Virginia Department of Environmental Quality

Session 2 Emission Factors Room: Cairo
Chairs: Joey Levasseur, U. S. EPA
Scott Southwick, GA DEP

10:30 am *Evaluation of the Transport and Deposition of Fugitive Dust Using Lidar*, D. Fitz, R. Philbrick, D. Pankratz, University of California, Riverside; R. Philbrick, G. Li, Pennsylvania State University

11:00 am *Methods for Quantifying Variability and Uncertainty in AP-42 Emission Factors: Case Studies for Natural Gas-Fueled Engines*, H. C. Frey, S. Li, North Carolina State University

11:30 am *Average Displaced Emission Rate (ADER): Approach and Methodology*, T. Kerr, R. Morgan, U.S. EPA; J. Haydel, B. Thapa, ICF Consulting.

Session 3 Fugitive Dust Room: Hong Kong
Chair: William Kuykendal,
U. S. EPA

10:30am *The Effect of Vehicle Speed on Unpaved Road Emissions*, G. E. Muleski, C. Cowherd, Jr., Midwest Research Institute

11:00 am *Improved Activity Levels for National Emission Inventories of Fugitive Dust from Paved and Unpaved Roads*, C. Cowherd, Jr., M. A. Grelinger, C. Kies, Midwest Research Institute; T. G. Pace, U.S. EPA

11:30 am *Measurement of PM₁₀ Emission Factors from Paved Roads Using On-Board Particle Sensors*, D. R. Fitz, C. Bufalino, University of California, Riverside

Tuesday, April 16, 2002

**Session 4 Particulate Matter/
Managed Burning**

Room: Hong Kong

Chair: William Kuykendal, U. S. EPA

- 1:00 pm *Potential of Polyethylene Oxide Solution as a Fugitive Dust Palliative*, S. Bae, H. I. Inyang, Global Institute for Energy and Environment Systems (GIEES).
- 1:30 pm *Emission Estimation Methods for Particulates: the CEPMEIP Emission Factor Database*, T. Pulles, A. Visschedijk, TNO-MEP, THE NETHERLANDS.
- 2:00 pm *Progress on Developing a Federal Reference PM Fine Source Test Method*, R. Myers, U.S. EPA.
- 2:30 pm *Emissions Estimate from Forest Fires: Methodology, Software and European Case Studies*, C. Trozzi, R. Vaccaro, E. Piscitello, Techne srl, ITALY.
- 3:00 pm BREAK
- 3:30 pm *A GIS-Based Methodology to Estimate Annual Valley Wide PM₁₀ Emissions for Clark County, Nevada*, S. Pulugurtha, D. James, University of Nevada, Las Vegas.
- 4:00 pm *The FHWA Particulate Matter Research Program*, K. N. Black, Federal Highway Administration.
- 4:30 pm *Locating and Quantifying Fine Particle Matter Emissions Originated from Residential Wood Burning*, J. Radke, Y. Q. Tian, D. Zhou, L. Mu, J. Xu, P. Gong, University of California, Berkeley.

Tuesday, April 16, 2002

Session 5 Data Management

Room: Montreal/Vancouver
Chair: Lee Tooly, U.S. EPA

- 1:00 pm *National Environmental Information Exchange Network - From Vision to Implementation*, K Dunne, The Environmental Council of the States; M. Shaffran, US EPA.
- 1:30 pm *Web Services Implementation: The Beta Phase of EPA Network Nodes*, C. Dwyer, C. Clark, U.S. EPA; M. Nobles, Logistics Management Institute.
- 2:00 pm *The System of the German Emission Inventory*, U. M. Döring, Federal Environmental Agency (UBA) Management; C. Schlenzig, U. Schellmann, Seven2one Information Systems, GERMANY.
- 2:30 pm *Developing Internet-Based GIS Applications to Manage and Disseminate Emissions Activity Data*, T. H. Funk, D. L. Coe, Sonoma Technology, Inc.
- 3:00 pm BREAK
- 3:30 pm *Environmental Data Management, Analysis, and Compliance System (EDMACS): Rethinking the Creation and Use of Emissions Data by the Regulated Community*, R. Emigh, C. Prostko-Bell, Windsor Technologies
- 4:00 pm *The Area Source Assessment Tool - A Software Application for Compiling Area Source Emission Inventories*. S. Boone, E. H. Pechan & Associates, Inc.; S. P. Anderson, Texas National Resource Conservation Commission; T. Stoeckenius, ENVIRON Corporation

Tuesday, April 16, 2002

Session 6 Greenhouse Gas

Room:

Cairo

Chairs:

Michael Gillenwater, U. S. EPA

Guido Franco, CA Energy Comm

- 1:00 pm *Technical Review of the National Greenhouse Gas National Inventories*, R. Acosta, S. Pesmajoglou, J. Grabert, R. Lichte, U. N. Climate Change Secretariat, GERMANY.
- 1:30 pm *1990-2000 Greenhouse Gas Emissions in Hong Kong Special Administrative Region*, A. L. Yu, K. H. Cheung, Environmental Protection Department, HONG KONG.
- 2:00 pm *An Assessment of the Use of Inventories in Determining Global Anthropogenic Methane and Nitrous Oxide Emissions*, E. Scheehle, W. Irving, D. Kruger, US EPA.
- 2:30 pm *California's Greenhouse Gas Emissions and Trends Over the Past Decade*, A. Choate, R. Freed, M. Gibbs, ICF Consulting; D. Coe, N. Hyslop, Sonoma Technology, Inc.; G. Franco, California Energy Commission.
- 3:00 pm Break
- 3:30 pm *Development of Methodologies for Calculating Greenhouse Gas Emissions from Electricity Generation for the California Climate Action Registry*, L. Price, C. Marnay, J. Sathaye, S. Murtishaw, D. Fisher, A. Phadke, Lawrence Berkeley National Laboratory; G. Franco, California Energy Commission.
- 4:00 pm *Development of a Consistent Methodology for Estimating Greenhouse Gas Emissions from Oil and Gas Industry Operations*, K. Ritter, American Petroleum Institute, M. Lev-On, BP p.l.c.; T Shires, URS Corporation.
- 4:30 pm *Development of a Corporate-Wide Process for Estimating Energy Consumption and Greenhouse Gas Emissions from Oil and Gas Industry Operations*, S. Nordrum, ChevronTexaco Research and Technology Company; A. Lee, ChevronTexaco Corporation
- 5:00 pm *Methods for Improving Global Inventories of Black Carbon and Organic Carbon Particulates*, W. Batty, EC/R Incorporated; T. G. Pace, U.S. EPA.

Tuesday, April 16, 2002

Poster Session

6:00 pm - 8:00pm

1990-2010 Area Source Emission Trends in the State of Texas, A. Bollman, H. Chelf, R. Strait, E. H. Pechan & Associates, Inc.

1999 Tugboat Fuel Consumption in Seattle Area, K. Agyei, Puget Sound Clean Air Agency

The System of the German Emission Inventory, U. Doring, Federal Environmental Agency; C. Schlenzig, U. Schellmann, Seven2One, Inc., GERMANY

Emission Inventory Reporting through EPA's Central Data Exchange: 2001 Reporting Period, L. Tooly, S. Dombrowski, C. Freeman, C. Clark, US EPA; R Chaudet, M. Nobles, Logistics Management Institute

Evaluating the Drivers, Benefits, and Challenges for Corporations to Perform Greenhouse Gas Inventories; Experiences of EPA's Climate Leaders Partner Companies, V. Camobreco, US EPA

Olympic Air Pollution Control Authority Air Toxics Emissions Inventory Interim Report, J. T. Kelly, Olympic Air Pollution Control Authority

Recent Activities Related to PM 2.5 Emissions Estimation, T. P. Pace, US EPA; M. Saeger, Pacific Environmental Services, Inc.

A Roadmap of Research: Improvements of Methods Used to Estimate GHG Emissions in California, G. Franco, California Energy Commission

Supporting Real-Time Air Quality Forecasting for Summer 2001 Using the SMOKE Modeling System, J. M. Vukovich, J. N. McHenry, C. J. Coats, A. Trayanov, MCNC-Environmental Programs. (At MCNC Booth)

Design of Emission Data Processing for Including Emissions Uncertainties, C. Frey, D. Loughlin, North Carolina State University; A. Holland, G. Cano, MCNC.

Tuesday, April 16, 2002

Poster Session (Continues)

6:00 pm - 8:00pm

Wind-Direction-Dependent Differences Between Model Calculations and Field Measurements as Indicator for Inaccuracies in Emission Inventories, J. A. vanAardeene, P. J. H. Builtjes, M. P. J. Pulles, TNO Institute of Environmental Sciences; L. Hordijk, C. Kroeze, Wageningen University, THE NETHERLANDS

EstimatER, An Expert System for Emissions, T. Pulles, TNO-MEP; J. Skakala, J. Svetlik, M. Linek, SPIRIT Informacne Systemy a.s., THE NETHERLANDS

ControlNET, Emissions Inventory and Control Technology Tool, F. Divita, L. Hockstad, P. Horch, E. H. Pechan & Assoc, Inc; L. Sorrels, B. Gilbert, U.S. EPA.

An Analysis Is Only As Good As the Data On Which It Is Based: EIA Electric Power Surveys and Their Quality Assurance Reviews, S. S. Rothschild, M. L. Cohen, E. H. Pechan & Assoc, Inc.

Update: E-GRID Data Base, R. Morgan, U.S. EPA; S. S. Rothschild, E. H. Pechan & Assoc, Inc.

The Emission Inventory and Air Quality Home Page, F. Divita, M. Salhotra, P. Horch, E. H. Pechan & Associates, Inc; B. Gilbert, U. S. EPA

Surrogate Selection within SMOKE to Obtain Realistic Spatially Resolved Mobile Source Emissions, Y. J. Choi, K. Yue, R. V. Calabrese, S. H. Ehrman, University of Maryland

Greenhouse Gas Inventory Tools for States, R. Freed; ICF Consulting; A. Choate, A. Denny, S. Brown, U.S. EPA.

Influence of Biogenic Emission Uncertainties on Ozone Model Predictions in the Boreal Forest, D. Fox, Environment Canada; K. McDonald, Concordia University College of Alberta, R. Goodson, Environment Canada.

Wednesday, April 17, 2002

Session 7a Stationary Source Methodologies

Room: Vancouver/Montreal

Chairs: Chuck Mann, U. S. EPA
Ray Bishop, Oklahoma DEQ

- 8:00 am *Weekday/Weekend Activity Patterns for Residential and Small Commercial Area Sources in Los Angeles*, D. Coe, P. Ryan, L. Chinkin, Sonoma Technology, Inc.
- 8:30 am *Development of Revised Emission Estimates for Important VOC Area Sources in Texas*, S. M. Roe, H. Chelf, M. Caldwell, R. P. Strait, E. H. Pechan & Associates, Inc; M. Torres, Texas Natural Resources Conservation Commission.
- 9:00 am *Lessons Learned in the Development of Regional Emission Estimates for Open Burning*, K. B. Thesing, S. M. Roe, E. H. Pechan & Associates, Inc.
- 9:30 am *Development of an Area and Mobile Sources Inventory for Reactive Chlorine Compounds in Southeast Texas*, C. E. Buklin, S. Erickson, J. T. Bursey, Eastern Research Group.
- 10:00 am BREAK

Session 7b Stationary Source Methodologies

Room: Vancouver/Montreal

Chairs: Roy Huntley, U.S. EPA
Bob Betterton,
So Carolina DHEC

- 10:30 am *Estimating PM and HAPs Area Source Emissions Using ASEM*, R. P. Strait, E. H. Pechan & Associates, Inc; T. G. Pace, U.S. EPA.
- 11:00 am *The Effect of Air Pollutant and Control Device Characteristics on Emission Rates*, M. L. Hochhauser, Allegheny County Health Department, R. J. Betterton, South Carolina Department of Health and Environmental Control.
- 11:30 am *Method for Development of Probabilistic Emission Inventories: Example Case Study for Utility No_x Emissions*, H. C. Frey, J. Zheng, North Carolina State University.

Wednesday, April 17, 2002

Session 8 Regional Planning Organizations

Room: Hong Kong

Chairs: Rosalina Rodriguez, U.S. EPA
John Hornback, SESARM

- 8:00 am *Assessment of Emission Inventory Needs for Regional Haze Plans*, S. Kayin, S. Wierman, Mid Atlantic Regional Air Management Association, B. Haneke, M. Saeger, Pacific Environmental Services, Inc.
- 8:30 pm *Preparation of a Base Year Inventory for Application to Regional Haze in the West*, L. Gribovicz, D. Schweher, B. Ramirez, Western Regional Air Partnership; M. Saeger, Pacific Environmental Services, Inc.
- 9:00 pm *Efforts to Improve Spatial and Temporal Emissions Allocation Procedures*, G. Stella, U.S. EPA; B. Haneke, W. Hodan, M. Saeger, Pacific Environmental Services, Inc
- 9:30 pm *New Approaches to PM Inventory Evaluation and Improvements*, M. Janssen, Midwest Regional Planning Organization/LADCO
- 10:00 pm BREAK
- 10:30 pm *Establishment of a Community Modeling and Analysis System Support Mechanism*, W. G. Benjey, National Oceanic and Atmospheric Administration; R. E. Imhoff, MCNC-Environmental Programs.
- 11:00 pm *A New Resource for International Emissions Inventory Development and Data Retrieval: A Proposal*, B. L. Hemming, S. R. Falke, T. J. Keating, US EPA; M. Levy, G. Yetman, B. Chen, Columbia University.
- 11:30 pm *Developing a National Emissions Inventory for Mexico, Phase I: Planning*, P. G. Fields, Eastern Research Group, Inc; R. Halvey, Western Governor's Association; W. B. Kuykendal, US EPA

Wednesday, April 17, 2002

Session 9a Tribal Issues

Room: Cairo

Chair: Annabelle Allison, Tribal Air
Monitoring Support Center

8:00 am *Practical Workshop on Emission Inventory*, K. C. Flores, Jr., Cortina Indian Rancheria.

8:30 am *Assisting Tribes in Submitting Data to the National Emissions Inventory, Challenges and Successes*, S. Kelly, V. Masayesva, Institute for Tribal Environmental Professionals; A. Allison, Tribal Air Monitoring Support Center.

9:00 am *A Robinson Rancheria's Emissions Inventory: A Minor Inventory Leading to Major National Impacts*, D. C. Jones, Robinson Rancheria.

9:30 am *Conducting an Emission Inventory for a Traditional Haudenasaunee Territory*, L. S. Printup, Tuscarora Environment Program.

10:00 am Break

**Session 9b Mobile Sources-
Modeling Issues**

Room: Cairo

Chairs: Laurel Driver and
Joe Pedelty, U.S. EPA

10:30 am *EPA's Plan for MOVES: A Comprehensive Mobile Source Emissions Model*, J. Koupal, H. Michaels, M. Cumberworth, C. Bailey, D. Brzezinski, U.S. EPA.

11:00 am *Design and Application of SMOKE Integration with MOBILE 6*, C. Seppanen, M. Houyoux, MCNC; M. Strum, G. Stella, N. Possiel, U.S. EPA.

11:30 am *An Object-Oriented Design for a New Generation Model for Mobile Source Emissions*, A. Eyth, K. Hanisak, P. Pai, C. Seppanen, MCNC.

12:00 pm Lunch

Wednesday, April 17, 2002

**Session 9b Mobile Sources
On-Road Issues**

Room: Cairo
Chairs: Laurel Driver and
Joe Pedelty, U. S. EPA

- 1:00 pm *The Use of MOBILE6 in Preparing National Onroad Emission Inventories*, M. A. Mullen, E. H. Pechan and Associates; L. Driver, J. Somers, U.S. EPA.
- 1:30 pm *Sensitivity Testing of MOBILE6, the US EPA's Most Recent Edition of It's Emissions Estimator for Gasoline and Diesel Powered Roadway Vehicles*, R. A. Giannelli, J. H. Gilmore, S. Srivastava, M. Beardsley, D. Brzezinski, G. Dolce, J. Koupal, J. Pedelty, U.S. EPA.
- 2:00 pm *Use of On-Board Tailpipe Emissions Measurements for Development of Mobile Source Emission Factors*, H. C. Frey, A. Unal, North Carolina State University.
- 2:30 pm *The California Department of Transportation/Air Resources Board Modeling Program (CAMP): New Research to Improve Speed Correction Factors and Mobile Source Emissions Modeling*, D. Eisinger, D. Niemeier, T. Kear, University of California, Davis.
- 3:00 pm Break
- 3:30 pm *Evaluation of On-Road Emissions from Transit Busses During Revenue Service*, D. Lambert, P. J. Wilson, M. Vojtisek-Lom, Clean Air Technologies, Inc.

**Session 9b Mobile Sources -
Non-Road Issues**

Room: Cairo
Chairs: Laurel Driver and
Joe Pedelty, U.S. EPA

- 4:00 pm *Quantification of Variability and Uncertainty for Selected Nonroad Mobile Source Emission Factors*; H. C. Frey, S. Bammi, North Carolina State University.
- 4:30 pm *Use of GIS Data for Allocating Aircraft, Rail, and Commercial Marine Vessels Emissions to the County Level*, R. Billings, A. Langmaid, R. Mongero, Eastern Research Group; L. Driver, C. Scarbro, US EPA.

Wednesday, April 17, 2002

**Session 10 Emission Inventory
Preparation for Modeling**

Room: Hong Kong
Chairs: Gregory Stella, U. S. EPA
Patrick Barickman, Utah DEQ

- 1:00 pm *The Climate-Air Quality Scale Continuum and the Global Emission Inventory Activity*, P. Middleton, RAND Corporation; W. G. Benjey, National Oceanic and Atmospheric Administration
- 1:30 pm *Projection of Future Years Emissions from Base-Year Toxics Emissions Inventory*, R. Mason, DynTel Corporation; M. Strum, U.S. EPA, D. Lindermann, EC/R Incorporated; J. S. Touma, National Oceanic and Atmospheric Administration.
- 2:00 pm *Forecasts of Emission Factors and Emission Inventory for Modeling Air Pollution in the CAM (Spain)*, J. Lumbreras, M. J. Sanchez, G. Urquiza and M. E. Rodriguez, Universidad Politecnica de Madrid -SPAIN
- 2:30 pm *Emission Model for Industrial Sources (EMIS)*, N. M. Wolfe, ENSCO, Inc.
- 3:00 pm Break
- 3:30 pm *Developing Spatial Surrogates for Modeling Applications*, J. W. Boulton, K. Siriunas, M. Lepage, S. Schill, Rowan Williams Davies and Irwin, Inc.
- 4:00 pm *Developing a Statewide Emission Inventory System Using Geographic Information System (GIS)*, P. Gaffney, California Air Resources Board
- 4:30 pm *The Implementation of BEIS3 within the SMOKE Modeling Framework*, J. M. Vukovich, MCNC-Environmental Programs; T. Pierce, National Oceanic and Atmospheric Administration.
- 5:00 pm *The Impacts of Biogenic Emissions Estimates from BEIS-3 on Ozone Modeling in the Southeastern US*, S. Arunachalam, Z. Adelman, R. Mathur, J. Vukovich, MCNC-Environmental Programs

Wednesday, April 17, 2002

**Session 11 Inventory Validation/
Quality Assurance**

Room: Montreal/Vancouver
Chairs: Rhonda Thompson, US EPA
Joshua Fu, Univ of Tennessee

- 1:00 pm *Uncertainty in Emission Inventories: What Do We Mean and How Could We Assess It?*, J. A. van Aardenne, M. P. J. Pulles, TNO Institute of Environmental Sciences, THE NETHERLANDS.
- 1:30 pm *A NIF-Based Validation/QA Database Management System for the Tennessee Emission Inventory*, J. S. Fu, W. T. Davis, T. L. Miller, C. H. Norman, University of Tennessee.
- 2:00 pm *A Demonstration of the Quality Assurance (QA) Software Specifically Developed for the National Emission Inventory (NEI)*, R. Thompson, US EPA.
- 2:30 pm *Incorporation of State, Local, and Tribal Emission Inventory Data into the 1999 National Emission Inventory*, R. Strait, S. Boone, D. McKenzie, S. Connor, E. H. Pechan & Associates, Inc.; R. Huntley, US EPA.
- 3:00 pm Break
- 3:30 pm *QC/QA - An Integral Step in the Development of the 1999 National Emissions Inventory for HAPs*, A. Pope, U.S. EPA, D. Wilson, S. Finn, Eastern Research Group, J. Oh, North Carolina State University.
- 4:00 pm *Texas Natural Resource Conservation Commission Quality Assurance and Quality Control Plan in the Preparation* , M. Torres, B. Limsakul, D. Preusse, Texas Natural Resource Conservation Commission.
- 4:30 pm *Use of GIS and GPS as a Quality Assurance Tool Emission Inventory*, A. Alexis, California Air Resources Board.

Thursday, April 18, 2002

Session 12 Agricultural Issues

Room: Cairo

Chair: Tom Pace, US EPA

- 8:00 am *Ammonia Emissions and Fertilizer Applications in California's Central Valley*, C. Kruater, D. Goorahoo, S. Klooster, California State University; C. Potter, S. Klooster, NASA Ames Research Center
- 8:30 am *Development of a Gridded Ammonia Emission Inventory for the San Joaquin Valley of California*, G. E. Mansell, ENVIRON International Corporation; S. M. Roe, E. H. Pechan & Associates, Inc.
- 9:00 am *Development of a Methane Conversion Factor to Estimate Emissions from Animal Waste Lagoons*, J. Mangino, U.S. EPA; D. Bartram, A. Brazy, Eastern Research Group, Inc.
- 9:30 am *Non-Point Source Ammonia Emissions in Texas: Estimation Methods, Pitfalls, Corrections, and Comparisons*, S. P. Anderson, Texas Natural Resource Conservation Commission; R. L. Corsi, J. Banks, K. Kinny, M. G. Sawar, University of Texas.
- 10:00 am Break
- 10:30 am *A Passive Monitoring Technique for Measuring Ammonia Fluxes for Emission Factor Measurement From Fugitive Sources*, D. R. Fitz, J. T. Pisano, University of California, Riverside; D. Goorahoo, C. F. Krauter, California State University; I. L. Malkina, University of California, Riverside.
- 11:00 am *Modeling and Processing Ammonia Emissions for PM Studies in the Lower Fraser Valley*, É. Giroux, H. Roth, D. Yin, W. Jiang, National Research Council of CANADA.



Thursday, April 18, 2002

Session 13 Air Toxics

Room: Montreal/Vancouver
Chair: Leonardo Ceron, US EPA
Lynn Barnes, So Carolina DHEC

8:00 am *The Development of the 1999 National Toxics Inventory*, A. Pope, U.S. EPA; R. Billings, S. Finn, D. Wilson, Eastern Research Group, Inc.

8:30 am Panel Discussion -
Colorado Study of the Contribution of Diesel Particulate Matter Emissions from Construction Equipment, L. Silva, Colorado Department of Public Health and Environment.

Air Toxics Emission Inventories and Monitoring in Hillsborough County, Florida, L. Shelton, Environmental Protection Commission of Hillsborough County

NATA: What South Carolina Learned As Related to Emissions Inventories, L. S. Barnes, R. B. Thompson, South Carolina Department of Health and Environmental Control

10:00 am Break

10:30 am *Air Emissions from Carpet Manufacturing Processes*, J. Mulholland, M. C. Pitrolo, R. Bissram, S. Patury, C. W. Bayer, R. J. Hendry, Georgia Institute of Technology.

11:00 am *Quantification of Uncertainty and Variability for Censored Data Sets in Air Toxics*, H. C. Frey, Y. Zhao, North Carolina State University.