

2015 International Emission Inventory Conference

“Air Quality Challenges: Tackling the Changing Face of Emissions”



Training April 13 - 14, 2015
Conference April 14 - 16, 2015
Doubletree by Hilton San Diego Mission Valley
San Diego, California



Sponsored by:
Emission Inventory and Analysis Group
Air Quality Assessment Division
Office of Air Quality Planning and Standards

Welcome to the 2015 Emissions Inventory Conference

The US Environmental Protection Agency (US EPA) looks forward to your participation in the 2015 Annual Emissions Inventory Conference in San Diego, California April 13 – 16, 2015. This year's Conference focuses on how emission inventories meet the challenges posed by emerging air quality issues, with a focus on the Western US. This theme highlights issues such as:

- How inventories can be used to assess the impacts of long-range transport on local NAAQS and other air quality issues;
- How do key sectors in the Western US, including Oil & Gas, fires and Agriculture affect local and regional air quality;
- What are the current challenges in estimating emissions for key sectors? How can we improve emission estimates for these key western sectors in inventories;
- How can we better account for tribal emissions to help improve air quality within tribal lands? Which sectors are key to tribal areas in the western US?
- How can we leverage work going on at the regional and local levels to inform the National Emission Inventory?
- How are such air quality emissions issues connected to emissions of greenhouse gases? How can both air quality improvement and global warming mitigation be considered in emissions methods?

Training courses on different aspects of inventory development and use will begin on Monday, April 13, 2015. This year in addition to the usual courses on MOVES and how to get data out of the Emissions Inventory System (EIS), we will also be offering training on ERTAC's EGU projection tool; training on the basics on preparing emissions for air quality modeling; two courses on tools to report, view, and account for GHG emissions and its reductions; a course on how EPA uses locally submitted activity data to develop fire emission estimates; a course on EPA's Oil and Gas Tool and another on other NonPoint Tools that EPA develops and uses for the NEI; a course on EPA's new emission factors development procedures, as well a course on the Toxics Release Inventory. To accommodate the extra training this time, we will devote a day and a half to Training. After the training is complete on Tuesday morning, the general conference will open with a plenary for all Conference attendees on the afternoon of Tuesday April 14, 2015. The plenary will include a welcome by the US EPA and local hosts, and a report from the US EPA's Emissions Inventory and Analysis Group followed by a set of speakers. All these speakers will then form a panel and have a general Q&A session with the audience. Then a full set of technical sessions will run all day Wednesday and Thursday.

We have a very interesting lineup of poster presentations and the authors will be available to explain their work and answer your questions

This is a great opportunity to keep abreast of developments in the world of emissions data and to share your experiences with other emission inventory professionals from federal/state/local and international regulatory agencies, tribal governments, industry and academia. We think you will also enjoy being in San Diego and look forward to seeing you at the Conference.

US EPA Conference Organizers
Emission Inventory and Analysis Group
Office of Air Quality Planning & Standards

Schedule at a Glance

Date/Time	Session	Room
Mon Apr 13		
8:00 – 11:45	ERTAC/EGU Emission Projection Tool	Shutter West I
8:00 - 10:00	Emission Inventory System (EIS)	Shutter West II
10:05 - 11:45	Toxics Release Inventory (TRI) Training	Shutter West II
8:00 - 11:45	EPA’S Methods For the Wildland Portion of the 2014 NEI	Shutter East I
8:00 - 11:45	MOVES 2014 Training	Shutter East II
11:45 - 1:15	Lunch (On Your Own)	
1:15 - 5:00	ERTAC/EGU Emissions Project - continues	Shutter West I
1:15 - 5:00	GHG Reporting Program Training	Shutter West II
1:15 - 5:00	Training on EPA’s Nonpoint Source Emissions Inventory Tools	Shutter East I
1:15 - 5:00	MOVES 2014 Training --- Continues	Shutter East II
Tues Apr 14		
8:00 – 11:45	Oil & Gas 101: Overview of Oil & Gas	Shutter West I
8:00 – 11:45	Preparing Emissions - Air Quality Modeling	Shutter West II
8:00 – 11:45	EPA’s New Emission Factor Procedures	Shutter East I
8:00 – 11:45	US GHG and AVERT Training	Shutter East II
12:00 - 1:30	Lunch (On Your Own)	
1:15 - 5:15	Plenary Session – Pending	Great Room IV and V
1:15 - 1:25	EPA/OAQPS – Tesh Rao	
1:25 - 1:35	EPA/OAQPS/R9	
1:35 - 1:55	EPA/OAQPS – Marc Houyoux, NEI	
1:55 - 2:25	CARB	
2:25 - 2:45	BREAK	
2:45 - 3:15	WRAP/WESTAR	
3:15 - 3:45	SCAQMD	
3:45 - 4:15	EPA/OAP	
4:14 - 5:15	Open Forum	
6:00 - 8:00	Poster Session and Exhibitors’ Reception	Great Room VI, VII and VIII

Schedule at a Glance (continue)

Date/Time	Session	Room
Wed Apr 15		
8:00 – 8:25	EI Preparation for AQ Modeling	Great Room I, II, III
	Global /International Issues	Great Room IV
	Air Toxics	Great Room V
8:25 – 8:50	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
8:50 – 9:15	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
9:15 – 9:40	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
9:40 – 10:10	BREAK	
10:10 – 10:35	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
10:35 – 11:00	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
11:00 – 11:25	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
11:25 – 11:50	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	Air Toxics - continues	Great Room V
11:50 – 1:20	LUNCH	

Schedule at a Glance (continue)

Date/Time	Session	Room
Wed Apr 15		
1:20 – 1:45	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	GHG Emissions including	Great Room V
1:45 – 2:10	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	GHG Emissions - continues	Great Room V
2:10 – 2:35	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	GHG Emissions - continues	Great Room V
2:35 – 3:00	EI Preparation for AQ Modeling- continues	Great Room I, II, III
	Global/International Issues - continues	Great Room IV
	GHG Emissions - continues	Great Room V
3:00 – 3:30	BREAK	
3:30 – 3:55	Biomass Burning	Great Room I, II, III
	Agricultural Emissions	Great Room IV
	GHG Emissions - continues	Great Room V
3:55 – 4:20	Biomass Burning - continues	Great Room I, II, III
	Agricultural Emissions - continues	Great Room IV
	GHG Emissions - continues	Great Room V
4:20 – 4:45	Biomass Burning - continues	Great Room I, II, III
	Agricultural Emissions - continues	Great Room IV
	GHG Emissions - continues	Great Room V
4:45 – 5:10	Biomass Burning - continues	Great Room I, II, III
	Agricultural Emissions - continues	Great Room IV
	GHG Emissions - continues	Great Room V
	ADJOURNED FOR THE DAY	

Schedule at a Glance (continue)

Date/Time	Session	Room
Thurs Apr 16		
8:00 – 8:25	Mobile Sources	Great Room I, II, III
	Oil & Gas	Great Room IV
	Tools/Emerging Technologies	Great Room V
8:25 – 8:50	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
8:50 – 9:15	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
9:15 – 9:40	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
9:40 – 10:10	BREAK	
10:10 – 10:35	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
10:35 – 11:00	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
11:00 – 11:25	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
11:25 – 11:50	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Tools/Emerging Technologies - continues	Great Room V
11:50 – 1:20	LUNCH	

Schedule at a Glance (continue)

Date/Time	Session	Room
Thurs Apr 16		
1:20 – 1:45	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Speciated Emissions Date of their use	Great Room V
1:45 – 2:10	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Speciated Emissions - continues	Great Room V
2:10 – 2:35	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Speciated Emissions - continues	Great Room V
2:35 – 3:00	Mobile Sources - continues	Great Room I, II, III
	Oil & Gas - continues	Great Room IV
	Speciated Emissions - continues	Great Room V
3:00 – 3:30	BREAK	
3:30 – 3:55	Mobile Sources - continues	Great Room I, II, III
	Emissions Data QA & Data Analysis	Great Room IV
	Speciated Emissions - continues	Great Room V
3:55 – 4:20	Mobile Sources - continues	Great Room I, II, III
	Emissions Data QA - continues	Great Room IV
	Speciated Emissions - continues	Great Room V
4:20 – 4:45	Mobile Sources - continues	Great Room I, II, III
	Emissions Data QA - continues	Great Room IV
	Speciated Emissions - continues	Great Room V
4:45 – 5:10	Mobile Sources - continues	Great Room I, II, III
	Emissions Data QA - continues	Great Room IV
	Speciated Emissions - continues	Great Room V
ADJOURNED FOR THE DAY		

TRAINING SCHEDULE

Monday – April 13, 2015

Course Title: Eastern Regional Technical Advisory Committee (ERTAC) Electricity Generating Unit (EGU) Emission Projection Tool

Instructor: Byeong-Uk Kim, Georgia Department of Natural Resources; Julie McDill, Mid-Atlantic Regional Air Management Association; Doris McLeod, Virginia Department of Environmental Quality; Mark Janssen, Lake Michigan Air Directors Consortium and Joseph Jakuta, Ozone Transport Commission

Time: 8:00am – 5:00pm

Place: Shutter West I

Course Description

This class will cover the theoretical background and basic operations of the ERTAC EGU Projection Tool, which estimates future year activity of fossil fuel fired, electrical generating units. Class content will include examples of how the Tool maybe applied to calculate the impacts of various air pollution control regulations (for example, the Mercury and Air Toxics Rule) on future year activity as well as NO_x, SO₂, and CO₂ emissions. Students will have opportunities to operate the ERTAC EGU Projection Tool as part of hands-on exercise sessions.

Course Title: Emission Inventory System (EIS) – How Do I Get the Data Out?

Instructor: Sally Dombrowski and Jonathan Miller, US EPA

Time: 8:00am – 10:00am

Place: Shutter West II

Course Description:

This course will cover the reports function in the Emission Inventory System to include the new comparison report as well as how to pull data for a single, or group of facilities.

Target Audience: **Registered EIS Users Only.**

Course Title: Toxic Release Inventory Training Course (TRI)

Instructor: Steve Witkin, US EPA/OEI

Time: 10:05am – 11:45am

Place: Shutter West II

Course Description:

Learn more about the TRI, who reports, what is collected by regulation and what supplemental data is included in some of the TRI tools. Focusing on air releases, we will explore tried and true access points along with new ways to access the data including the new P2 tool (currently available) and the TRI Analyzer tool (schedule to go public summer 2015). We will also cover navigating the annual TRI National Analysis Report, which this year includes an expanded 'Beyond TRI' section

Course Title: EPA's Methods for the Wildland Fire Portion of the 2014 NEI – A Focus on State-Provided Data

Instructors: Sean Raffuse, Sonomatech and Sim Larkin, USFS

Time: 8:00am – 11:45am

Place: Shutter East I

Course Description:

This course will cover EPA's methods for the Wildland fire portion of the 2014 NEI, with a focus on state-provided data. We will provide an overview of how the emissions are calculated, discuss why local data are important, and explain how local data are used. The specific fire information needed by the SmartFire-BlueSky emissions process, as well as formats and timelines, will be covered in depth. The course is aimed at states looking to improve emission estimates for their area by becoming engaged in the process, but anyone with interest in US Wildland fire emissions is welcome.

Course Title: MOVES2014 Training

Instructors: Gary Dolce and Chris Dresser, US EPA/OTAQ

Time: 8:00am – 5:00pm

Place: Shutter East II

Course Description:

This full day course will focus on some of the more advanced features of MOVES2014 typically covered in the second day of the basic MOVES 2-day course. This includes using Emission Rates mode, using Custom Domains, using Project Scale, and using the Nonroad portion of MOVES. Some prior knowledge of MOVES would be helpful, but we will begin with a very quick overview of more basic MOVES tasks. Attendees will need to bring laptop computers with MOVES2014 already installed and tested. Please allow enough time ahead of the course for installation and testing, as we will not be able to resolve installation problems the day of the course.

Course attendance will be limited to 40.

Course Title: Greenhouse Gas Reporting Program Training

Instructors: Kong Chiu and Alexis McKittrick, US EPA

Time: 1:15pm – 5:00pm

Place: Shutter West II

Course Description:

The GHG Reporting Program collects facility-level greenhouse gas emissions data from individual facilities above certain emissions thresholds. Through this program, EPA provides specific facility and supplier-level emissions data for approximately 85-90% of total U.S. GHG emissions. EPA has been collecting data from facilities through the GHGRP since 2010 for most sectors, and has published annual emissions data from all facilities covered by the GHGRP for 2010-2013 through the Facility Level Information on Greenhouse Gases Tool (FLIGHT) and associated data products.

This course is for anyone interested in learning more about this data set. The course is divided into a few parts. The course will begin with background about the program and its coverage. The next part will walk through EPA's process for collecting and verifying data, including features and workflows in EPA's electronic data management system that support data validation and

compliance follow-up with reporters. EPA will then provide an overview of how to access GHGRP data on-line, including how data is being shared with state and local governments and how states can incorporate the GHGRP data collection into their own programs. EPA also will provide a deeper dive into the data collected from the oil and gas industry, special considerations to keep in mind when accessing this data, and an update on newly collected activity data for this industry. Time for questions and answers will be provided during and after the presentation. If possible, participants are encouraged to review the reporting requirements and data publication tools offered by the Greenhouse Gas Reporting Program prior to the session (<http://www.epa.gov/ghgreporting/>).

Course Title: Training on EPA's Nonpoint Source Emissions Inventory Tools

Instructor: Jennifer Snyder, US EPA and David Cooley and Jonathan Dorn Abt Associates

Time: 1:15pm - 5:00pm

Place: Shutter East I

Course Description:

EPA, along with Abt Associates, has developed and improved several tools over the past year to help estimate nonpoint source emissions at the county level. These include individual tools to estimate emissions of criteria pollutants and HAPs from:

- residential wood combustion;
- combustion at industrial, commercial, and institutional facilities; and
- solvent use.

Each of these tools has recently been released to the public to allow state, local, and tribal agencies to more easily estimate emissions from these sources.

The training session will be led by Abt Associates staff that have helped to develop and update these tools, including improving their accuracy, efficiency and user friendliness. The training will include an overview of the tools and a discussion of the procedures used and assumptions made to estimate emissions. There will also be an interactive demonstration of each tool using sample datasets.

Participants are encouraged to bring their laptops to run the tools during the training session. The tools and sample datasets are available for download at the link below. (**Note that MS Access must be installed on the laptop.**)

Training Schedule (continues)

Tuesday – April 14, 2015

Course Title: Oil and Gas 101: An Overview of Oil and Gas Upstream Activities and Using EPA's Nonpoint Oil and Gas Emission Estimation Tool for the 2014 NEI

Instructor: Jennifer Snyder, US EPA and Regi Oommen and Mike Pring, Eastern Research Group

Time: 8:00am – 11:45am

Place: Shutter West I

Course Description:

Nonpoint source emissions from the oil and gas exploration and production sector has gained interest in recent years in the United States as drilling technology has allowed development of unconventional oil and gas plays (such as shale or tight sands) in areas where there was previously no activity, or where activity had subsided after depletion of the conventional reserves. While the major emissions sources associated with oil and gas collection, processing, and distribution have traditionally been included in the National Emissions Inventory (NEI) as point sources (e.g. gas processing plants, pipeline compressor stations, and refineries), the activities occurring “upstream” of these types of facilities has not been as well characterized. EPA developed the Nonpoint Oil and Gas Emission Estimation Tool to assist state and local agencies with estimating emissions from these upstream sources.

This course is for stakeholders interested in learning about the types of sources and emissions that may occur at upstream oil and gas exploration and production sites and for those interested in using the Nonpoint Oil and Gas Emission Estimation Tool to compile an emissions inventory for this important source category. The course is divide into three parts. The first part will provide a general overview of the upstream oil and gas exploration and production processes and emissions covered by the tool. The second part includes a discussion of EPA's plans for the 2014 NEI pertaining to oil and gas. The third part will cover use of the tool to compile emissions estimates and prepare them for submittal to EPA and the 2014 NEI.

Participants must bring their own laptop computers with the latest version of the Nonpoint Oil and Gas Emission Tool already installed prior to the beginning of the course. Intended audience – Federal/State/Local/Tribal Agencies and Contractors.

Course Title: Preparing Emissions for air quality Modeling – The Basics

Instructor: Alison Eyth, US EPA

Time: 8:00am – 11:45am

Place: Shutter West II

Course Description:

In the Preparing Emissions for Air Quality Modeling class, we will discuss the techniques and steps involved with taking emissions inventories and preparing them for use in air quality models. Topics will include describing the processes of chemical speciation, temporal allocation and spatial allocation, along with the non-emission inventory data sources used for each process. We will also review the typical quality assurance steps performed to ensure that the emissions modeling steps completed successfully such that the inventory data is properly and fully reflected in the air quality model inputs. Techniques used to develop emissions for future year modeling will be discussed. This class will be lecture only, meaning that no hands-on computer programs will be used during the training. We plan to allow plenty of time for questions and answer sessions on each major topic covered.

Course Title: EPA's New Emissions Factor Development Procedures

Instructor: Gerri Garwood, US EPA

Time: 8:00am – 11:45am

Place: Shutter East I

Course Description:

Over the last eight years, the EPA has been developing a multi-part process to improve the air pollutant emissions factor program and to make the program self-sustaining. In August 2013, the EPA posted a draft final document describing the new emissions factor development procedures. This document supersedes the previous guidance for emissions factor development (*Procedures for Preparing Emission Factor Documents* (EPA-454/R-95-015, November 1997)). The document presents an introduction to emissions factors and provides the historical background for how and why the EPA has developed recommended emissions factors for stationary emissions units or processes. It describes the new approach and procedures that the EPA will follow when developing new or revising existing emissions factors and the procedures, data evaluation criteria, associated tools, and data management systems that the EPA recommends for developing air pollutant emissions factors for stationary emissions units or processes.

In order to implement these new procedures, the EPA has developed a number of tools, including a Microsoft Access® desktop application called the Electronic Reporting Tool (ERT), a portal in the EPA's Central Data Exchange called the Compliance and Emissions Data Reporting Interface (CEDRI), and an interactive emissions factor database called Web Factor Information Retrieval (WebFIRE). This presentation will discuss how all of the pieces fit together. We will then step through the new procedures and how to access emissions data collected electronically. Finally, we will discuss new procedures that will allow people to create their own specialized emissions factor.

Course Title: US Greenhouse Gas (GHG) Emissions and Avoided Emissions and Generation Tool Training (AVERT)

Instructor: Robyn DeYoung and Leif Hockstad, US EPA/OAP

Time: 8:00am – 11:45am

Place: Shutter East II

Course Description:

EPA will present an overview of GHG emissions in the US and its AVert tool that can be used to estimate emissions benefits of actions.

EPA publishes an annual national level Inventory of U.S. Greenhouse Gas Emissions and Sinks. The Inventory of U.S. Greenhouse Gas Emissions and Sinks is a comprehensive top-down assessment of national GHG emissions, and presents emissions across multiple years starting in 1990. EPA uses national energy data, data on national agricultural activities, and other national statistics to provide a comprehensive accounting of total GHG emissions for all man-made sources in the United States. Topics covered during the training will include: the history, purpose, and scope of this report; the coverage of sources and sectors in the U.S.; the data sets and methodologies used in calculating national greenhouse gas emissions; recent trends and long-term trend drivers; and, new tools offered to download data and graphics from the report.

In addition, EPA has developed a free and user friendly tool to estimate emissions impacts of energy efficiency (EE) and renewable energy (RE) policies and programs so that air quality planners can incorporate those impacts into their NAAQS SIPs. The AVoided Emissions and geneRation Tool (AVERT) quantifies the displaced sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂) emissions of EE/RE policies and programs within the continental United States (Alaska, Hawaii, and U.S. Territories are not modeled). AVERT captures the actual historical behavior of electricity

generating units' (EGUs') operation on an hourly basis to predict how EGUs will operate with additional EE/RE delivered to the electricity grid.

The AVERT training will teach participants how to use AVERT to analyze different types of EE programs, wind, geothermal and solar technologies within AVERT's main module. Participants will learn how to interpret the various output display tables and work with SMOKE-ready outputs for use in air quality models.

The AVERT training will also walk through the steps participants would need to take to modify base year data with specified retirements, additions and emission rate changes and re-run the baseline data through AVERT's Statistical Module to create a new future-year for analysis in the Main Module.

The course is divided into two parts – the first part (~ 1.5 hours) will focus on the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013, the most recent annual report on national level greenhouse gas emissions. The second (~ 2.5 hours) will focus on the AVOIDed Emissions and geneRation Tool (AVERT) and how to use the tool and run scenarios.

Poster Session

Tuesday – Thursday

8:00am – 2:00pm

1. “*BOEM’s year 2001 Emission Inventory for the Gulf of Mexico Outer Continental Shelf*”, H. Ensz, BOEM, D. Wilson and R. Billings, ERG.
2. “*Show Me the Data: Improving Results of RTR Residual Risk Assessments*”, A. Pope, T. Palma, US EPA, S. Enoch, ERG
3. “*Emissions Development for Air Quality Forecasts in the Pacific Northwest*”, F. Herron-Thorpe, S. Summers, S. Otterson, WA State Dept. of Ecology J. Vaughan and D. Polley, Washington State University.
4. “*Fires in Washington State – Working Towards Better Estimates for the NEI*,” F. Herron-Thorpe, WA State Dept. of Ecology.
5. “*Potential Impact of Changing the Coal-Natural Gas Split in Power Plants: An Emissions Inventory Perspective for Criteria Pollutants*”, A. Roy, Y. Choi, University of Houston
6. “*Burning Estimates on the Flint Hills using MODIS, NLCD, and R*”, A. Hawkins, US EPA, Y. Tang, and D. Watson, Kansas Dept. of Health and Environment.
7. “*Development of a 2010 year Emission Inventory for the Modelling Regional Air Quality in the Canadian Arctic*”, R. Munoz-Alpizar, S. Cousineau, M. Sassi, and P. Bellavance, Environment Canada
8. “*Near-Term Climate Mitigation by Short-Term Forcers*”, S. Smith, PNN.
9. “*The Global Emissions Initiative (GEIA) – Working for Better Emissions Information across the World*”, G. Frost, NOAA; L. Tarrasón, NILU/Norway; C. Granier, NOAA, University of Colorado, LATMOS/IPCL; M. Planck Institute for Meteorology/Germany; P. Middleton, Panorama Pathways.
10. “*Review Georgia Onroad Emissions in NEI2011*”, Di Tian, G. Grodzinsky and J. Boylan, GA DNR.
11. “*Arizona’s Consolidated E-Technology Solutions*”, M. Burton and L. Toopal, AZ DEQ.
12. “*The ECCAD Database: Access to Global and Regional Emissions Data* ” S. Darras, SEDOO, Observatoire-Midi-Pyrennes, France; C. Granier, LATPOS/IPSL, Sorbonne Universites, Paris, CIRES, University of Colorado, NOAA; C. Liousse, Laboratoire d’ Aerologie, France; D. Boulanger, SEDOO, Observatoire-Midi-Pyrennes, France; E. Enriquez, SEDOO, Observatoire-Midi-Pyrennes, France; K. Sinderalova, and T. Doumbia, LATMOS/IPSL, Sorbonne Universites, Paris
13. “*A Well-to-Wheels Life Cycle Assessment for the Bus Rapid Transit System TransMilenio and Comparison with other Modes of Passenger Transportation*”, Y. Cuellar, R. Buitrago, and L. C. Belalcazar, Universidad Nacional de Colombia.
14. “*AVERT –EPA’s New Tool that Estimates the Emission Impacts of Energy Efficiency and Renewable Energy Using Statistically Driven Behavioral Simulation of Historical EGU Dispatch Patterns*”, R. DeYoung, US EPA and J. Fisher, Synapse Energy Economics..

15. *"Air Emissions from Biopower Production"*, M. Carreras-Sospedra, J. Brouwer, and D. Dabdub, UC-Irvine; R. Williams, California Biomass Collaborative
16. *"Evaluating CMAQ Simulations of Ammonia Sources, Formation and Impacts using Surface, Aircraft, and Satellite Data, Atmospheric and Environmental Research,"* C. Lonsdale, J. Hegarty, K. Cady-Pereira and M. Alvarado, Atmospheric and Environmental Research; and D. Henze and M. Turner, University of Colorado-Boulder; and J. Murphy, M. Markovic and T. VandenBoer, University of Toronto; and J. Nowak, Aeordyne Research.
17. *"Impact of Applying a Woodstove-temperature Adjustment to Residential Wood Combustion Emissions in the Pacific NW for use with AIRPACT-4 Air Quality Forecasting System"*, D. Polley, J. Vaughn, B. Lamb and S. Chung, Washington State University; and C. Bowman and S. Otterson, WA Dept. of Ecology
18. *"Black Carbon Emissions from Biomass Burning in Northern Eurasia from 2002 to 2012"*, W. M. Hao, A. Petkov, B. Nordgren, R. E. Corley and S. P. Urbanski, US Forest Service
19. *"Assessment of Artificial Intelligence based Air Quality Forecasting Models addressed to Anthropogenic Emissions"*, D. Mishra and P. Goyal, Centre for Atmospheric Sciences, IIT-New Delhi, India.
20. *"Development of Future Year Mexico Emissions"*, M. E. Wolf and G. K. Manne, ERG and A. Eyth and R. Tooly, US EPA.
21. *"Development of some Improved Canadian Spatial Surrogates"*, Q. Zheng, M. D. Moran and J. Zhang, Environment Canada.
22. *"Enhancements in the EIS Reporting Functionality"*, J. Miller, US EPA
23. *"The Regional Criteria Pollutant and Greenhouse Gas Inventory for Metro Vancouver, Canada: Evolution of Inventory Methods in response to changing Air Quality Management Policies"*, F. Ries, D. Jennejohn, S. Sidi and R. Quan, Metro Vancouver.
24. *"MOVES ODBC Transportation Inventory System"*, D. Wells, Colorado Dept. of Public Health and Environment.
25. *"Updates to Vehicle Population and Activity Data in MOVES2014"*, A. Eibert, D. Brzezinski, D. Cox, D. Sonntag, C. Dresser, G. Dolce and B. VanGessel, US EPA
26. *"Regression Analysis of Fleet Average Emission Factors of Onroad Vehicles Simulated in MOVES"*, H. Yang, University of Texas-El Paso.
27. *"Characteristics and more Accurate Emission Factors of Vehicular Evaporative Emissions"*, H. Man and H. Liu, Tsinghua University.
28. *"Web-based Data Sharing in NC"*, T. Manning and B. McLamb, NC DENR.
29. *"Future Year Emission Estimates from Electrical Generating Units,"* M. Janssen, LADCO (co-authors to be added later).

32. *“Emission Projections for long-haul Freight Trucks and Railways through 2050 in the United States”*, L. Liu, and T. Hwang, and S. Lee, University of Illinois, Urbana-Champaign, S. J. Smith, PNNL, Y. Ouyang and B. Lee, University of Illinois, Urbana-Champaign, F. Yan, University of Illinois, Urbana-Champaign/Argonne National Laboratory, K. Daenzerand, PNNL, and T. C. Bond, University of Illinois, Urbana-Champaign.
33. *“Pneumatic Controller Emissions from a Sample of 172 Production Facilities”*, B. Gillis, Chesapeake Energy and G. Campbell, Devon.
34. *“Impact of Changes in Barometric Pressure on Llandfill Methane Emissions”*, L. Xu, LI-COR Biosciences, Xiaomao, LI-COR Biosciences/Kansas State University; L. J. Amen, LI-COR Biosciences; K. Welding, Bluff Road Landfill, Nebraska; and D. McDermitt, LI-COR Biosciences.
35. *“Comparative Analysis of SMOKE-MOVES and DTIM-EMFAC’s Gridden Emission Inventory Output”*, H. Perugu, and L. Ramirez, CARB; J. Koupal, ERG; and BH Baek, UNC-Institute for the Environment.
36. *“Profile of the 2011 National Emissions Inventory”*, L. Driver, S. Dombrowski, M. Strum, R. Tooly, J. Drukenbrod, V. Rao, R. Thompson, J. Snyder and R. Mason, US EPA
37. *“Development and Quantification of Uncertainty of Region Specific Emission Factors for Residential Heating in Turkey,”* E. Oksuz, B. Kaynak-Tezel, A. Unal, L. Pozzoli, and T. Kindap, Istanbul Technical Universtiy
38. *“Oklahoma’s Tips and Tricks for EIS Point Source Submission,”* C. Schroeder, OK DEQ
39. *“EPA’s Residential Wood Combustion Tool: Improvements and Applications,”* D. Cooley and J. Dorn, Abt Associates and J. Snyder and R. Huntley, US EPA

Wednesday Morning - April 15, 2015

Session 1: EI Preparation for Modeling Including Projections

Chairs: Alison Eyth, US EPA/OAQPS
Wayne Boulton, RWDI

- 8:00 "Recent Updates to Spatial Surrogates for Modeling U.S. Emissions Sources" Zac Adelman, Brian Ness, Mohammad Omary, and Limei Ran, UNC Institute for the Environment; Amnon Bar-Ilan, Tejas Shah and John Grant, ENVIRON; and Rich Mason, Alison Eyth and Alexis Zubrow, US EPA.
- 8:25 "ERTAC EGU Tool: Origin and Uses," Doris McLeod, VA DEQ; Julie McDill, MARAMA; Mark Janssen, LADCO; Joseph Jakuta, OTC; Byeong-Uk Kim, GA EPD; and Jin-Sheng Lin, VA DEQ.
- 8:50 "Projections of Wildland Fire Emissions Corresponding to Vegetation Changes Due to Climate Change," Maureen Mullen, Thompson G. Pace, and James Wilson, SC&A, Inc..
- 9:15 "Changes in Emissions due to GHG Mitigation Strategies," Michael MacKinnon, Marc Carreras-Sesperda, Jacob Brouwer and Donald Dabdub, UC-Irvine.
- 9:40 **BREAK**
- 10:10 "2010 Canadian CAC Emission Inventories for the Air Quality Modelling Platform Supporting Policy Regulations," Mourad Sassi, Mehrez Samalli, Jacinthe Racine, and Sophie Cousineau, Environment Canada
- 10:35 "Emissions Preparation for High-Resolution Air Quality Modelling over the Athabasca Oil Sands Region of Alberta, Canada," Junhua Zhang, Qiong Zheng, Mike D. Moran, Paul A. Makar, Ayodeji Akingunola, Shao-Meng Li, and George Mason, Environment Canada; Mark Gordon, York University; and Richard Melick, Alberta Environment & Sustainable Resource Development
- 11:00 "GCAM-USA--A Tool for State-Level Energy and Emission Projections," Steven Smith, Page Kyle and Pralit Patel, Joint Global Change Research Institute/PNNL.
- 11:25 "Emission Inventories and Projections in Large Ports Area: an European Case Study," Carol Trozzi, Techne Consulting/Italy.
- 11:50 **LUNCH**

Session 2: Global/International Issues

Chairs: Rebecca Tooly, US EPA/OAQPS
Greg Frost, NOAA

- 8:00 "Changes in Anthropogenic Surface Emissions during the past Decades: Comparisons Between Different Global and Regional Inventories," Claire Granier, Cooperative Institute for Research in Environmental Sciences, University of Colorado; Katerina Sindelarova and Thierno Doumbia, LATMOS/IPSL; Sabine Darras and Catherine Liousse, Laboratoire d' Aerologie; Hugo Denier van der Gon, TNO/Netherlands; Gregory Frost, NOAA; and Greet Maenhout-Janssens, Joint Research Center, Italy.
- 8:25 "A community Emissions Data System (CEDS) for (developing) Historical Emissions," Steven Smith, Pacific Northwest National Laboratory.
- 8:50 "Global Methane Emissions and Impacts on Regional Air Quality," Daven Henze, University of Colorado-Boulder.
- 9:15 "Comparisons of Asian Emissions Inventories," Eri Saikawa, Cindy Young, Hankyul Kim, and Min Zhong, Emory University; Jun-ichi Kurokawa, Asia Center for Air Pollution Research; Yu Zhao, Nanjing University; Greet Janssens-Maenhout, Joint Research Center; Ispra, Qiang Zhang, Tsinghua University; Toshimasa Ohara, National Inst. Of Env. Studies and Ajay Nagpure, University of Minnesota.

9:40 **BREAK**

10:10 “Air Pollutant Emissions and Trends of Anthropogenic Sources in China: 2000-2030,” Shuxia Wang, Bin Zhao, Jiandong Wang, and Kebin He, School of Environment, Tsinghua University, Beijing, China

10:35 “Traffic Emission in Asian Cities and Co-Benefit of Faster Vehicle Technology Intrusion,” Nguyen Thi Kim Oanh, Asian Institute of Technology.

11:00 “Small-scale Domestic Fuel Combustion in Un-electrified Low-income Settlements: Lessons from South Africa,” Seneca Naidu, South African Weather Service; Stuart Piketh, North-West University and Christopher Curtis, University of the Witwatersrand

11:25 “Black Carbon Emissions from Diesel Sources in Murmansk City and Murmansk Region of Russia,” Teresa Kulinski, US EPA; Meredydd Evans, Nazar Kholod, Sha Yu, Battelle, Svetlana Tretyakova, Vladimir Malyshev, Evgeny Gusev, and Alexander Barinov, MSTU

11:50 **LUNCH**

Session 3: Air Toxics

**Chairs: Madeleine Strum, US EPA/OAQPS
Chun-Yi Wu, MPCA**

8:00 “The 2011 National Air Toxics Assessment,” Madeleine Strum, Ted Palma, Alison Eyth, James Thurman, Sharon Phillips, Rich Mason, Mark Morris, Rich Cook, Alexis Zubrow, and Rich Scheffe, US EPA.

8:25 “Developing Modeling-Ready Emissions Inventory for MATES IV Study,” Sang-Mi Lee, Xinqu Zhang, Joe Cassmassi and Philip Fine, SCAQMD/California.

8:50 “Emissions Inventory and Health Risk Assessment of Toxic Air Pollutants for the Canadian Lower Fraser Valley and Vancouver, British Columbia,” Dana Sullivan, Yuan Du, Stephen Reid, and Michael McCarthy, Sonomatech; Francis Ries and Derek Jennejohn, Metro Vancouver.

9:15 “Best Practices for Preparing Lead (Pb) Emission Inventories from Piston-Powered Aircraft,” Jeremy Heiken, Sierra Research/Trinity.

9:40 **BREAK**

10:10 “2014 Portland Oregon Residential Wood Combustion Survey, Christopher Swab, Oregon DEQ.

10:35 “Lessons Learned from the Residential Wood Combustion Surveys,” Chun-Yi Wu, Lisa Herschberger, David Bael, Mary Jean Fenske, and Kari Palmer, MPCA.

11:00 “Toxics Release Inventory Data and Tools - Updates and Activities Worthy of Notice,” Steve Witkin, US EPA.

11:25 “The Toxics Release Inventory and Emissions Reduction Measures,” Daniel Teitelbaum, US EPA.

11:50 **LUNCH**

Wednesday Afternoon - April 15, 2015

Session 1: EI Preparation - continues

Chairs: Alison Eyth, US EPA/OAQPS
Wayne Boulton, RWDI

- 1:20 "Competing Source Emission Inventories for Air Quality Analysis," Brandy Albertson, OR Dept. of Environmental Quality
- 1:45 "Forecasting Emissions in California," Gabe Ruiz, Adrian Griffin, Guihua Wang, Chengfeng Wang, Larry Hunsaker, and Anny Huang, California Air Resources Board.
- 2:10 "Air Pollutant Emissions Modeling and Analysis for the Three-State Air Quality Study," Zac Adelman, Mohammad Omary, Dongmei Yang, UNC Institute for the Environment; Ralph Morris, Amnon Bar-Ilan, Tejas Shah and John Grant, ENVIRON; and Tom Moore, Western Governors Association.
- 2:35 "Baseline Emissions Inventory and Future Year Projections for the Arctic Air Quality Modeling Study," Paula Fields Simms, M. Wolf, R. Billings, M. Pring, R. Oommen, and D. Wilson, ERG; H. Crowley, and V. Raps, Bureau of Ocean Energy Management.
- 3:00 **BREAK**

Session 2: Global/International Issues - continues

Chairs: Rebecca Tooly, US EPA/OAQPS
Greg Frost, NOAA

- 1:20 "North American Black Carbon Emissions Estimation Guidelines," John Koupal, Paula Fields Simms, and Gopi Manne, ERG; and Orlando Cabrera-Rivera, Commission for Environmental Cooperation.
- 1:45 "Urban Measurements of NMVOCs and a Comparison to their Representation in Emission Inventories," Erika von Schneidmesser, Boris Bonn, Tim Butler, and Mark Lawrence, Institute for Advanced Sustainability Studies; Hugo Denier van Der Gon, TNO/Netherlands; Christian Ehlers, Dieter Klemp, Forschungszentrum/Germany; Heidi Hellen and Rainer Nothard, Senatsverwaltung fur Stadtentwicklung; and Umwelt/Berlin, Paul Monks, University of Leicester, UK
- 2:10 "Inter-Comparison of Different NO_x Emission Inventories and Associated Variation in Simulated Surface Ozone (O₃) in Indian Region," Sachin Ghude, Chinmay Jena, D.M. Chate, and G. Beig, Indian Institute of Tropical Meteorology; Rajesh Kumar and G.G. Pfister, National Center for Atmospheric Research.
- 2:35 "Using Satellite Observations to Detect and Quantify Large Emission Sources Worldwide," David Streets, Zifeng Lu, Argonne National Laboratory.
- 3:00 **BREAK**

Session 4: GHG Emissions Including Methane and BC

Chairs: Leif Hockstad, US EPA/OAP
Melissa Weitz, US EPA/OAP

- 1:20 “A Gridded (0.1 degree x 0.1 degree) Monthly Resolved Version of the U.S. EPA National Methane Emissions Inventory for use as Apriori and Reference in Methane Source Inventories,” Joannes Dyonisius, J.D. Maasackers, D. J. Jacob, A. J. Turner and M. P. Sulprizio, Harvard University; Tom Wirth and C. Hight, US EPA; A. A. Bloom, Jet Propulsion Laboratory/CalTech.
- 1:45 “Near-Term Climate Mitigation by Short-Term Forcers,” Steven Smith, PNNL.
- 2:10 “Impact of Changes in Barometric pressure on Landfill Methane Emissions,” Liukang Xu, LI-COR, Xiaomao, LICOR/Kansas State University, Karla Welding, Bluff Road Landfill, Nebraska, and Dayle McDermitt, LI-COR.
- 2:35 “Use of Historical Measurements to Constrain BC Emission Inventory of the United States from 1960s to 2000s,” Tianye Sun, Liang Liu, Wayne Chang and Tami C. Bond, University of Illinois at Urbana-Champaign; Mark Flanner and Chaoyi Jiao, University of Michigan—Ann Arbor; Thomas W. Kirchstetter and Chelsea V. Preble, Lawrence Berkeley National Laboratory/UC-Berkeley.
- 3:00 **BREAK**
- 3:30 “Petroleum and Natural Gas Systems Greenhouse Gas (GHG) Emissions: Comparison between the GHG Inventory and the GHG Reporting Program,” Miriam Lev-On, The LEVON Group; Karin Ritter, American Petroleum Institute; and Terri Shires, URS Corporation.
- 3:55 “Rapid Identification of Location and Magnitude of Urban Natural Gas Leaks,” Joseph C. von Fischer and Jay Ham, Colorado State University.
- 4:20 “Top-Down Estimate of Methane Emissions in California using a Mesoscale Inverse Modeling Technique,” Yuyan Cui, Jerome Brioude, Stuart McKeen, Wayne Angevine, Siwan Kim, Gregory J. Frost, and Jeff Peischl, NOAA/CIRES-University of Colorado, Boulder; Zhen Liu, Combustion Research Facility, Sandia National Laboratories; Thomas Ryerson and Michael Trainer, NOAA; and Steve C. Wofsy, Harvard.
- 4:45 “Cross Verification of GHG Inventory with NEI Data,” Kotur Narasimhan, VA DEQ

Session 5: Biomass Burning

Chairs: Sean Raffuse, Sonomatech
Sin Larkin, USDA US Forest Svc
Tesh Rao, US EPA/OAQPS

- 3:30 “Developing Agricultural Burning Emissions Inventories to Support the Quantification of Fire-Related Ozone Impacts for an Exceptional Event Demonstration,” Kenneth Craig, Yuan Du, and Stephen Reid, Sonomatech; Tom Gross and Doug Watson, Kansas Department of Health and Environment.
- 3:55 “Georgia Wildland Fire Emissions and Their Air Quality Impacts,” Di Tian, Tao Zeng and James Boylan, GA DNR.
- 4:20 “Crop Residue Burning in the 2014 National Emissions Inventory,” G. Pouliot and V. Rao, US EPA; J. McCarty, Michigan Technological Institute; and Amber A. Soja, NASA.
- 4:45 “Comparison of National-Scale Biomass Burning Emission Estimates using the latest in Emission Factor Research in the BlueSky Smoke Modeling Framework,” Susan O’Neill, Narasimhan K. Larkin, and Miriam Rorig, USDA Forest Service; Joseph K. Vaughan, Brian K. Lamb, and Serena Chung, Washington State University.

Session 6: Agricultural Emissions

**Chairs: Rhonda Thompson, US EPA/OAQPS
Peter Adams, Carnegie Mellon
University**

- 3:30 “Building a Processes Based Model for Livestock Emissions,” Mark Jannssen, LADCO and Margaret McCourtney, MPCA
- 3:55 “Development of a Province-Wide, Source-Specific, and Spatially-Resolved Agricultural Air Emissions Inventory,” Wayne Boulton, Carol McClellan, Trudi Task, and Matthew Sawycky, RWDI; and Jacquay Foyle, BC Ministry of Agriculture/Canada
- 4:20 “Modeling Livestock Ammonia Emissions in the United States: From Farms to Emissions to Particulate Matter,” Alissa McQuilling and Peter Adams, Carnegie Mellon University.
- 4:45 “Ammonia Emissions from Western Livestock Lagoons,” Richard H. Grant and Matthew T. Boehm, Purdue University.

Thursday Morning - April 16, 2015

Session 7: Mobile Sources

**Chairs: Gary Dolce, US EPA/OTAQ
Alexis Zubrow, US EPA/OAQPS
John Koupal, ERG**

- 8:00 “Validation of MOVES2014 through the Comparison of Measurements from Dynamometer, Remote Sensing, Tunnel, Roadside and Ambient Air Quality Studies,” David Choi, Megan Beardsley, Darrell Sonntag, and Edward Nam, US EPA.
- 8:25 “Impact of MOVES2014 on Emission Inventories from On-road Mobile Sources,” Alexis Zubrow, Darrell Sonntag, Harvey Michaels, David Brzezinski, and Alison Eyth, US EPA.
- 8:50 “SMOKE-MOVES2014 Integration Tool Development,” Bok H. Baek and Catherine Seppanen, UNC-Institute for the Environment; Alexis Zubrow and Alison Eyth, US EPA.
- 9:15 “MOVES2014 Emissions Using Day-Specific Hourly Meteorology Compared With Monthly Average Meteorology,” Harvey Michaels, Alexis Zubrow, David Brzezinski, Alison Eyth and Darrell Sonntag, US EPA.
- 9:40 **BREAK**
- 10:10 “Development of Onroad Emissions for the 2011 NEI,” John Koupal, Alison DenBlyker, Jeannete Alvis and Scott Fincher, ERG, Alexis Zubrow, David Brzezinski, Harvey Michaels, Alison Eyth, and Laurel Driver, US EPA
- 10:35 “An Analysis on 2011 NEI Mobile Source Inventory Generated by MOVES and SMOKE-MOVES,” Jin-Sheng Lin, VADEQ, Julie McDill, MARAMA, and Eric Zalewsky, NYSDEC.
- 11:00 “Modeling Truck Idling Emissions in Central Texas,” Andrew Hoekzema, Capital Area Council of Governments, Austin, TX.
- 11:25 “Development of Road Traffic Emission Inventories for Urban Air Quality Modeling in Madrid (Spain),” Rafael Borge, Christina Quassdorff, Julio Lumbreras, Javier Perez, Juan Manuel de Andres, Adolfo Narros, and Encarnacion Rodriguez, University of Madrid, Spain.
- 11:50 **LUNCH**

Session 8: Oil and Gas

**Chairs: Tom Moore, WRAP/WESTAR
Regi Oommen, ERG**

- 8:00 “Design of a new Emissions Inventory Operator Survey for Oil and Gas Emissions of GHGs,” Amnon Bar-Illon, John Grant, Garvin Heath, Dan Zimmerle, Lee Gribovicz, and Victor Diakov, ENVIRON Corporation.
- 8:25 “Top-Down Estimation of Emissions from Oil and Gas Production and their Impact on Air Quality within a Regional Air Quality Model,” Stuart McKeen, R. Ahmadov, W. Angevine, K. Aikin, J. Brioude, C. Brock, S. Brown, Y. Cui, G. Frost, J.A. DeGouw, J. Gilman, B. Lerner, J.A. Neuman, J. Peischl, J.M. Roberts, T. Ryerson, M. Trainer, P. Veres, C. Warneke, and B. Yuan, NOAA.
- 8:50 “Comparing Top-Down and Bottom-up Estimates of Oil & Gas Methane Emissions: A Spatially-Resolved Emission Inventory for the Barnett Shale Region, Texas,” David Lyon and Daniel Zavala-Araiza, Environmental Defense Fund.

- 9:15 “Improving Flare Gas Emission Estimation Tool,” M. T. Ziyarati, N. Bahramifar, H. Younesi, and G. Baghmisheh, Tarbiat Modares University, Tehran, Iran
- 9:40 **BREAK**
- 10:10 “The Statistics of Super-Emitters: Modeling Heavy-Tailed Distributions of Environmental Pollutants with Power Laws,” Marc Mansfield, Utah State University.
- 10:35 “EPA’s Oil and Gas Emissions Estimation Tool,” Mike Pring and Regi Oommen, ERG, and Jennifer Snyder, US EPA, and Roy Huntley, US EPA (Retired)
- 11:00 “An analysis of the US EPA Oil and Gas ACCESS Database Tool,” Julie McDill, MARAMA, and Jin-Sheng Lin, VADEQ.
- 11:25 “Update on Action Plan to Improve Oil and Gas Emission Inventories,” Mark Gibbs, OK DEQ.
- 11:50 **LUNCH**

Session 9: Tools/Emerging Technologies

**Chairs: Sally Dombrowski, US EPA/OAQPS
Michael Burton, AZ DEQ**

- 8:00 “AVERT –EPA’s New Tool that Estimates the Emission Impacts of Energy Efficiency and Renewable Energy Using Statistically Driven Behavioral Simulation of Historical EGU Dispatch Patterns,” Robyn DeYoung, US EPA and Jeremy Fisher, Synapse Energy Economic
- 8:25 “Local GHG Inventory Tools for Government Operations and Communities,” Andrea Denny, US EPA and Lauren Pederson, ICF International.
- 8:50 “Implementation of a MODIS Aerosol Algorithm for Air Pollution Detection,” A. Cáceres, M. Hahn, E. Gülch, and R. Jimenez, University of Applied Sciences Stuttgart, Germany.
- 9:15 “SLEIS-The Next Generation,” Kevin Jeffery and Bret Smith, Windsor Solutions.
- 9:40 **BREAK**
- 10:10 “Temporal Allocator Tool Development in EMF,” Catherine Seppanen, MARAMA, Bok H. Baek, UNC-Institute for the Environment and Susan McCusker and Julie McDill, MARAMA.
- 10:35 “Excel-based Program for Project Level MOVES Modeling,” Ahammad Ali and Mike LePage, RWDI.
- 11:00 “Demonstration of the New Improved Consolidated Point Sources Criteria, Toxics and GHG Annual Emissions Inventory System based on Device Level Reporting,” Natasha Meskal, Ali Ghasemi, Michael Meskal, and Zorik Pirvesian, ECOTEK
- 11:25 “Emissions, What Emissions, Examples of Emission Inventory Use by the Air Quality Program of the confederated Tribes of the Colville Reservation,” Kris Ray, Confederated Tribes
- 11:50 **LUNCH**

Thursday Afternoon - April 16, 2015

Session 7: Mobile Sources (continues)

Chairs: Gary Dolce, US EPA/OTAQ
Alexis Zubrow, US EPA/OAQPS
John Koupal, ERG

- 1:20 “Mobile Source Emissions Inventory Preparation in the Metro Region of Vitoria Using Brazilian Default Emission Rates in SMOKE Model,” Taciana Albuquerque and Igor Baptista de Araujo, Federal University of Espirito Santo (UFES).
- 1:45 “Vehicle Emissions and Life Cycle Analysis Models of Gasoline and Electric Vehicles,” Corey Walker and Aly M. Tawfik, CA State University, Fresno.
- 2:10 “Long-Term Trends in Mobile Source Emissions and Urban Air Quality,” Brian McDonald, Si-Wan Kim, Greg Frost, and Michael Trainer, CIRES, Colorado
- 2:35 “Category 1/Category 2 Vessel Port Underway Split for 2011 National Emission Inventory,” Richard Billings, Heather Perez, Jenifer Sellers, and Roger Chang, ERG, and Laurel Driver, US EPA.
- 3:00 **BREAK**
- 3:30 “Modeling Non-Road Agricultural Tractor Emissions in Central Texas,” Andrew Hoekzema, Capital Area Council of Governments, Austin, TX and Rick Baker, ERG.
- 3:55 NONROAD PANEL DISCUSSION - A 75-minute session to get user input for EPA’s planned update to improve nonroad modeling capabilities in MOVES. The session will include an EPA presentation describing current plans to update the model, and discussion with participants about potential improvements and priorities.
- 4:20 NONROAD PANEL DISCUSSION
- 4:45 NONROAD PANEL DISCUSSION

Session 8: Oil and Gas (continues)

Chairs: Tom Moore, WRAP/WESTAR
Regi Oommen, ERG

- 1:20 “Oil and Gas Panel Discussion -- Following a series of podium paper presentations on the morning of April 16th, the O&G Emissions panel will convene to present and discuss a variety of perspectives on data collection, analysis, and applications of upstream and midstream O&G Emissions data. Panelists invited are a cross-section of emission inventory program leads and subject matter experts from state air agencies, U.S. EPA, environmental organizations, and O&G industry operators. Panelists are asked to address the following questions in brief remarks, supported by a brief presentation as needed, within about 8 minutes. Panelists are expected to identify the highest priority technical issues and activities their organization is working on, with respect to the questions.
- What are your group’s most important, current challenges in estimating emissions and conducting related analyses for the upstream and midstream O&G emission sector?
 - How can we improve emission estimates for the most uncertain parts of this sector in inventories?
 - What is your organization doing to address gaps and data quality?
- 1:45 Oil and Gas Panel Discussion
- 2:10 Oil and Gas Panel Discussion
- 2:35 Oil and Gas Panel Discussion and Wrap Up

3:00 **BREAK**

Session 10: Speciated Emissions Data and Their Use **Chairs: Mike Kosusko, US EPA/ORD**
Rich Mason, US EPA/OAQPS

- 1:20 “EPA's SPECIATE 4.4 Database: Bridging Data Sources and Data Users,” Michael Kosusko, Alexis Zubrow, Rich Cook, SPECIATE Workgroup, US EPA and Ying Hsu, Jonathan Dorn, and Frank Devita, Abt Associates.
- 1:45 “The Role of NMVOC Emissions in Modeled Ozone,” Erika von Schneidemesser, Tim Butler, and Jane Coates, IASS/Potsdam, Germany, Hugo Denier van der Gon, TNO/Netherlands, Kathleen Mar, IASS/Potsdam, Germany, Chalmers Institute of Technology/Sweden, Johan Melqvist, TNO/Netherlands, Arjo Segers, TNO/Netherlands, David Simpson, Chalmers Institute of Technology/Sweden, EMEP, and Sntoon Visschedijk, TNO/Netherlands
- 2:10 “Contributions of Tire Wear and Brake Wear to PM Emissions Inventories for On-Road Mobile Sources,” S. Bai, Y. Du, and S. Reid, Sonoma Technology.
- 2:35 “Incorporation of Air Toxics and Improved Speciation for Non-road Emissions in MOVES,” Rich Cook, Lawrence Reichle, Rich Cook, Darrell Sonntag, Harvey Michaels, David Brzezinski, Ed Glover, Megan Beardsley, Alexis Zubrow, Alison Eyth, and Laurel Driver, US EPA.
- 3:00 **BREAK**
- 3:30 “Effects of Temperature on Gasoline Motor Vehicle Exhaust VOC Speciation,” Aniban Roy, University of Houston, and Darrell Sonntag, Catherine Yanca, Rich Cook, David Hawkins, Charles Schenk, and Joseph McDonald, US EPA, and Yunsoo Choi, University of Houston.
- 3:55 “National Emissions from Lawn and Garden Equipment,” Jamie Banks, Quiet Communities, Inc., and Robert McConnell, US EPA.
- 4:20 “Development of Chemically Resolved Profiles for Attainment Planning,” Leonardo Ramirez and Wenli Yang, ARB.
- 4:45 “Evaluating Complexity in Fire Emissions Modeling-Is More Better?,” Kelley Barsanti, Portland State University, John Orlando, NCAR, Lindsay Hatch, Portland State University, Chelsea Stockwell, University of Montana, Patrick Veres, CIRES/Colorado, Robert Yokelson, University of Montana, Louisa Emmons, NCAR, and Christine Wiedinmyer, NCAR.

Session 11: Emissions Data QA and Data Analysis

**Chairs: Zac Adelman, UNC Institute for the Environment
BH Baek, UNC Institute for the Environment**

- 3:30 “Constraining NO_x Emissions with Space-Based Data: Step 1: Understanding the Correspondence of Ozone Monitoring Instrument (OMI) NO₂ Column Observations to US AQS and CEMS Data,” Bryan Duncan, Lok N. Lamsal, and Yasuko Yashida, NASA
- 3:55 “Evaluating Northeast Electric Generating Unit NO_x Emissions Based on Electric Demand,” David MacKintosh and Robert McConnell, US EPA.
- 4:20 “Compilation Emission Inventory for Greece using an Economic Driven Approach,” Aggeleki Demertzi, Athanasios Sfetsos, Diamando Vlachogiannis, Nikolaos Gounaris, and Vassiliki Varela, INSTRATES, NCSR, Greece, and Zachariah Adelman, UNC-Institute for the Environment.
- 4:45 “Estimation of Mobile Source Emission Maps Using Transportation Planning Process and Geographic Information Systems,” Kim Youngkook, Department of Comprehensive Transport, The Korea Transport Institute, South Korea.

Registration

Conference Registration for Attendees and Exhibitors

To register for the conference, training courses and Exhibitor, please complete the on-line registration form located on the conference registration web page at [Register for Conference](#). If you cannot access the Conference Registration webpage, please contact Abt Associates at 919-294-7825 or email Elconference@abtassoc.com. Training courses are on a first come, first served basis, via registration. For additional information regarding registration, please contact Kim Paylor at (919) 541-5474.

Hotel Registration

The DoubleTree Hotel by Hilton Hotel San Diego -- Mission Valley is holding a limited block of guest rooms at the conference rate of \$142.00/night plus tax -- single/double occupancy for the nights of April 13 – 16, 2015. The room block rate will remain in effect until **March 13, 2015** or until the room block sells out whichever comes first. Use the [online reservation system](#) to make your reservations on or before **March 13, 2015**. After March 13, 2015, reservations are subject to space and rate availability.

If you have further questions about guest rooms, please contact the Doubletree Hotel – Mission Valley at 800-222-TREE or Abt Associates at 919-294-7825 or email Elconference@abtassoc.com.