Western Meteorological, Emissions, and Air Quality Modeling Workshop

Final Agenda

June 21-23, 2011
Millennium Harvest House Hotel
1345 28th Street
Boulder, CO 80302
Phone: (303) 443-3850

This 2.5-day workshop will review and discuss modeling and evaluation of meteorology, primary and secondary precursor emissions, and air quality for the Ozone and PM2.5 NAAQS, and other air quality related values across the Western U.S. The intended participants are technical air quality modeling staff from Western states, local air agencies, tribes, federal land managers, and EPA regional offices, OAQPS, and ORD. This workshop will NOT address air quality planning or control strategies.

Webinar and conference call access to the workshop for presentation materials and voice participation has been E-Mailed to participants who have registered in advance. As a courtesy to those on the phone and in the meeting room, please place your phone on mute except when speaking. If you have difficulty with access or the quality of the phone line or webinar, please call Tom Moore at 970.988.4055.

Tuesday, June 21st

Background Session – Setting the Stage

8:00 Welcome, Introductions, Expectations, Agenda Review (Tom Moore, Kirk Baker, Gail Tonnesen)
8:15 Overview of regulatory drivers for photochemical modeling across the West (Tyler Fox, EPA OAQPS)

Session 1 – Photochemical Modeling across the West – Big Picture Perspectives

9:15 Current meteorological modeling across the West (Dennis McNally, Alpine GeoPhysics)
9:35 Development of a Western Ozone Scoping Plan to support air quality analysis and planning (Jean-Paul Huys, Clark County AQMD, NV)
10:00 Photochemical Model Performance Evaluations for Ozone in the West (Gail Tonnesen, EPA R8)
10:30 PM2.5: characteristics of air quality and model performance in the Western US. (Heather Simon, EPA OAQPS)
11:15 Update on WestJumpAQMS project (Tom Moore, WGA/WRAP)
11:45 Lunch (on your own)

Session 2 – Applying Photochemical Modeling Tools to evaluate Western Air Quality - Case Studies

1:00 Uncertainty and research needs for photochemical modeling in the western states (Gail Tonnesen, EPA R8)
1:40 Winter Ozone Analysis in WY’s Upper Green River Basin (Kelly Bott, WY DEQ)
2:10 Oil and Gas Source Contributions to Denver/North Front Range Ozone and VOC using CAMx/OSAT and CMB/PMF (Ralph Morris, ENVIRON)
2:50 Break
3:05  **Simulating Nitrogen Deposition and Ozone Impacts** at Western National Parks with CAMx (Mike Barna, NPS)

3:45  **Challenges of meteorological and photochemical modeling** of Utah's wintertime cold pools (Lance Avey, UT DAQ)

4:10  **Overview of Central California Winter PM<sub>2.5</sub> Data Analysis and Modeling + Issues** (Saffet Tanrikulu, BayAreaAQMD)

4:50  WRAP-up and adjourn for the day

**Wednesday, June 22<sup>nd</sup>**

**Session 2, continued**

8:00  Agenda Review (Tom Moore, Kirk Baker, Gail Tonnesen)

8:15  **Modeling the fate of atmospheric reduced nitrogen during the RoMANS 2009 field campaign** (Marco Rodriguez, CIRA)

9:00  Panel Discussion: What big picture applications and science improvements are most needed to model air quality in the Western U.S.? (Tom Moore, WRAP, leader)

10:00  Break

**Session 3 – Applying Emissions Inventories for Modeling across the West**

10:15  **2008 National Emissions Inventory and Associated Modeling Platforms** (Rich Mason, OAQPS)

11:15  **Historical WRAP emissions inventory estimates** (Tom Moore, WRAP)

11:50  Lunch (on your own)

1:00  **Improved Western Biogenic Emission Inventories project** (Alex Guenther, NCAR)

1:35  **A Comprehensive Emissions Inventory** of Upstream Oil and Gas Activities in the Rocky Mountain States (Amnon Bar-Ilan, ENVIRON – by phone)

2:15  **Overview of Fire emissions inventories for air quality evaluation** (Dave Randall, Air Sciences)

3:00  Break

3:15  Panel Discussion: Emissions Inventories and Emissions Modeling - Summarize key issues and action items (Kirk Baker, EPA OAQPS, leader)

**Session 4 – Applying Tools and Methods for Air Quality Evaluation across the West**

4:15  **SIP Modeling: Modeled Attainment Demonstrations and Weight of Evidence** (Brian Timin, OAQPS)

5:00  WRAP-up and adjourn for the day

**Thursday, June 23<sup>rd</sup>**

**Session 4, continued**

8:00  Agenda Review (Tom Moore, Kirk Baker, Gail Tonnesen)
8:10  Ozone contribution assessment based on ozone designations modeling (Kirk Baker, OAQPS)

8:35  Issues associated w/ background ozone and the secondary ozone standard (Pat Dolwick, OAQPS)

9:10  Using photochemical models to estimate single source impacts on secondary pollution (Bret Anderson, USFS)

9:35  Modeling Challenges for Ozone Exceptional Event Demonstrations (Richard Payton, EPA R8)

10:00  Break

10:15  Modeling for PM2.5 Attainment Demonstrations in EPA Region 10: An Assortment of Proposed Models from CMAQ to Linear Rollback (Bob Kotchenruther, EPA R10)

10:45  Panel Discussion: Leveraging modeling applications for multiple uses (SIPs, Haze, NEPA, et cetera) and assessing long-range Ozone transport to and within the Western U.S.? (Gail Tonnesen, EPA R8, leader)

11:30  Plenary WRAP-up Discussion: What are the next steps and how can we collaborate via exchange of datasets of shared interest? (Tom, Kirk, and Gail, leaders)

12:00  Adjourn workshop

Afternoon – EPA OAQPS and RO staff meeting