



**Minutes for the STMPR Advisory Group Meeting
Wednesday, August 9, 2006**

1. Welcome and Introduction

Mr. Joe Cassmassi, Planning & Rules Manager, Planning, Rule Development and Area Sources, called the meeting to order at 1:30 p.m. and presented a brief overview of the agenda for the meeting. There were no comments on the July 12, 2006 meeting minutes.

2. Modeling Emissions Inventory Update

Mr. Cassmassi gave an update on the status of modeling and inventory. CAMx 4.4 with updated SAPRC99 chemistry was selected for ozone modeling. The modeling results for 2002 and 2010 would be used to develop preliminary Relative Reduction Factors (RRFs). The performance of CALMET was compared to MM5/FDDA. For PM2.5 modeling, the base year 2005 and 2015 were selected; the assessment for boundary conditions were complete, and testing was conducted to determine the percent reduction needed for attainment. Regarding the inventory, Mr. Cassmassi indicated that staff was working on the issues related to speed correction adjustments for future years and silt loading for paved road dust.

3. Sensitivity Analysis for July 2005 Episodes --- Development of Clean Boundary Conditions & Assessing Impact of ETOH, MBUT and MTBE to SAPRC99

Dr. Mark Bassett, Air Quality Specialist, presented the results for a series of three sensitivity runs for the July 2005 episode. In the first run, boundary, top and initial conditions were obtained from the WRAP runs. The second run was conducted with CAMx version 4.2 and included the effect of ETOH, MTBE and MBUT by a method suggested by ARB. The third run was conducted with CAMx version 4.4 which treated these species explicitly. The results of each of these runs were compared with observed data. Plots were shown displaying the variation of the ozone concentration with time for six monitoring stations including Santa Clarita, Crestline, Rubidoux, Fontana, Banning and Los Angeles. The spatial variation of the differences in concentrations, and the performance statistics were also presented. These sensitivity runs showed that CAMx version 4.4 performed better than WRAP and CAMx version 4.2 in predicting the ozone concentrations for the July 2005 episode.

4. Preliminary Ozone Analyses: Simulating base year using CAMx4.4 and MM5/FDDA

Dr. Satoru Mitsutomi, Program Supervisor, presented updated emissions inventory as of August 1, 2006. The VOC emissions inventory increased approximately 160 tons per day on weekend and decreased 38 tons per day on weekdays compared to May version. The NOx emissions inventory increased approximately 30 tons per day on weekend and 60 tons per day on weekdays. These changes were mostly from mobil sources inventories.

Dr. Mitsutomi presented the comparisons among the various CAMx sensitivities runs. The maximum ozone concentration differences for all hours and cells ranged from 4-6 ppb between CAMX version 4.4 with and without ETOH, MTBE, and MBUT. CAMx version 4.2 used in the past analysis ignored these three species. The performance statistics were presented using the CAMx version 4.4 Beta, MM5/FDDA meteorological fields and the latest emissions inventories. The peak concentrations were under predicted for all episodic periods, more on weekends than on weekdays. The location of the simulated peaks was off from the observed peaks. However, biases based on the best simulated peaks were acceptable if the maximum value of the 7x7 surrounding stations was used. The spatial pattern of ozone concentrations for July episode was presented as an example. The CAMx model sensitivity to the increase of VOC by 200 tons was also presented.

5. Preliminary PM2.5 Analyses: Simulating 2002, 2005, and 2015

Dr. Bong Kim, Air Quality Specialist, gave a presentation of sensitivity analyses on hourly varying ppb SO₂ boundary conditions. Sulfate concentrations were slightly under-predicted at most stations but overall sulfate was within reasonable range. He provided a preliminary future base year 2015 simulation results. PM2.5 mass concentrations were 2 to 5 ug/m³ lower than those of year 2005. Spatial distribution of all chemical components were reasonable except others category. Concentrations of others category at Wilmington, Compton, and Downtown LA were two or three times higher than that of Rubidoux. He showed aerial photographs of monitoring stations and surrounding areas with color-coded 9 cell grids with fugitive dust emissions overlaid on the images. He pointed out that paved road dust emissions at Wilmington, Compton, and Downtown LA were two or three times higher than Rubidoux and that is

inconsistent with the measured PM data. He also pointed out that construction emissions in the future years were same or greater than that of the base year. Lastly, he showed simulation results of various emissions reductions.

6. Closing Remarks/Scheduling Next Meeting/Adjourn

There being no additional public comments, Mr. Cassmassi adjourned the meeting at approximately 4:00 p.m.

Attendance
August 9, 2006 STMPR Advisory Group Meeting

MEMBERS PRESENT

Ed Avol, USC
Carol Bohnenkamp, U.S. EPA
Shep Burton, Consultant

Bill Dennison, California Small Business Alliance
Rory MacArthur, Western States Petroleum Association
Ralph Morris, ENVIRON

MEMBERS ABSENT

John DaMassa, California Air Resources Board
Rob Farber, Southern California Edison
Jane Hall, CSUF
Deng Bang Lee, SCAG
Steve Levy, Center for Continuing Study of the
California Economy
Fred Lurmann, Sonoma Technology, Inc.

Reza Mahdavi, CARB
Karen R. Polenske, MIT Dept of Urban Studies & Planning
Paul Ong, UCLA School of Public Policy & Social Research
George Treyz, Regional Economic Models, Inc.
Frank Wen, SCAG

OTHERS PRESENT

Bruce Jackson, CARB
Julia Lester, ENVIRON
Jonathan Nadler, SCAG

AQMD STAFF

Mark Bassett, Air Quality Specialist
Joe Cassmassi, Planning & Rules Manager
Kevin Durkee, Air Quality Specialist
Ed Eckerle, Program Supervisor
Bong-Mann Kim, Air Quality Specialist

Satoru Mitsutomi, Program Supervisor
Minh Pham, Air Quality Specialist
Zorik Pirveysian, Environmental Technology Assessment
Manager
Laki Tisopulos, Assistant Deputy Executive Officer