

**Minutes of the BAAQMD 2004 SIP Modeling Advisory Committee (MAC)
Third Meeting**

**The third meeting of the MAC was held on
Wednesday, September 11, 2002, at 1:00 p.m.
at the District office, fourth floor west conference room.**

Attendees: see sign-up listing attached

Agenda: Posted with these minutes on project web site
(www.environ.org/project.html; click on "Bay Area Air Quality Management District"; enter user name and password)

Next meeting: October 30, 2002 (1:00pm at BAAQMD)

Presented overhead/.ppt presentations: posted with these minutes on project web site

Handouts: Agenda; Minutes from last meeting (from Project Web site); Second Draft of [Project] Modeling Protocol (dated August 2002 – from Project Web site); "Progress Report: CCOS Modeling Inventory" handed out by John DaMassa, CARB; comments on refinery emissions (email from Julia May at CBE to MAC members of 11/10/02).

Discussion items:

Agenda -- No additional agenda items were added.

Approval of minutes from last meeting -- Comments/corrections to last meeting minutes: no comments or revisions offered by attendees

Protocol Discussion

Main topic of this meeting was to be the Second Draft Protocol Document.
Presentation and discussion comments included:

Episode Selection --

Cluster analysis results were presented by D. Fairley. From that analysis, three episodes were recommended: July 11-12, 1999; June 15, 2000; July 31, 2000. Discussion followed.

Weekend vs. weekday: need to surely include this in the rationale for episode selection; ambient pollutant levels may reflect a delayed effect of weekend emissions – Monday

ambient levels may reflect Saturday/Sunday emissions and “cooking” of same. Is there a difference in the spatial pattern of peak ozone on weekday vs. weekend?

Three episodes tend to come up as most desirable for characterizing ozone in Bay Area and likely representing transport and related considerations: July 30-Aug 2, 2000; June 14-15, 2000, July 11-12, 1999 (Fairley; Umeda). Discussion continued to emphasize the need for better characterization of the broad ozone formation patterns represented by these episodes (Ziman). Some examination of population exposure related to ozone patterns was suggested (Shipp).

Question was brought up about how met conditions vary among episodes; are there different categories of met, or does one type cover them all? Cluster analysis should include some met parameters. Transport of ozone and precursors really needs to be explicitly considered in the episode selection (Shipp; Greene). Usually transport episodes out of the Bay Area are non-exceedance events in the Bay Area (Fairley). Need to know met as reasons for exceedance patterns in each episode -- what is the mechanism? Is it always locally generated/transported, or can some events be caused by transport into the Bay Area? SIP controls in the Bay Area will have little effect on the latter (Emery). Some value to using the NOAA “HYSPLIT” to do back trajectory assessment as a way to help screen episodes. Cost effective and straightforward (Emery). Important to examine profiler data carefully (Shipp). Suggestion that Fairley examination be expanded to include 2002 data as well as previous work (Ziman; Greene).

Suggested episodes really represent a good range of considerations (weekend/weekday, transport, and high Bay Area ozone values (DeMandel). Additional episode characterization would be interesting, but at least one CCOS episode should be selected (DaMassa). July 1999 episode is particularly attractive to ARB if it represents a broad CCOS domain-wide (although not a CCOS intensive period) high ozone period [it does] (DaMassa). If BAAQMD is resource-limited in carrying out this additional episode (original study plan/scope-of-work only called for two episodes), ARB may be able to assist in funding somehow (DaMassa). T&B meteorological assessments being done under CCOS sponsorship may be of some use, but will not be completed for some time, likely too late for this current episode characterization effort (DaMassa).

June 14-15 CCOS episode: “Rapid Rise” peak is probably not representative of broad problem. Reason for the very localized peak is likely going to be difficult to describe. Not as severe as that seen in Houston ship channel area, but of similar ilk (Ziman). Certainly not same emissions phenomenon though (Souten; Ziman). Other episodes surely are more representative of both high ozone formation in Bay Area and transport to downwind areas (Fairley). This episode also does not include a weekend day (Fairley).

Overall priority of episode selection seems to be: 1) July 31, 2000; 2) June 2000; 3) July 11-12, 1999; (4) yet another episode possibly to pick up something that is currently missing in the top 3. Need to look at 1999 more deeply, including a met

analysis. Need to finalize episode selection. Need comments by October 1. A conference call was scheduled for selection finalization – October 7 (Hess).

Emissions –

John DaMassa presented current view of CCOS schedule for emissions work and availability to Bay Area effort. See attachment/handout. July-Aug 2000 episode is coming along nicely. Next in priority is Sept 2000 episode (not of interest to Bay Area), and lastly the June 14-15 2000 episode. Not clear when data will be provided for the June, 2000 episode.

Will 2000 census data be used in spatial surrogates (Ziman)? Yes, 2000 census may be used for new surrogate data from STI (DaMassa). Wildfires may be important (Shipp). Some discussion of how to account for Nevada emissions in CCOS domain. CARB is undecided as to what to use (DaMassa). Wilkinson to discuss with V. Hughes to better define approach. Project will also need a description of the methodology to derive future year projections.

Comments received from Julia May (representing CBE comments) regarding refinery emissions, especially flare emissions (see attachment/handout). Bay Area technical staff reviewing and will prepare written recommendation on approach to use to quantify day specific emissions from refineries during selected modeling episodes (Hess). Uncertainties in refinery emissions could be modeled with CAMx to provide range of impacts that might occur (Bornstein). Not in scope of work currently (Emery).

Next meeting: October 30, 2002 (Hess).