



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

**ADVISORY COUNCIL REGULAR MEETING
JOINT MEETING OF THE AIR QUALITY PLANNING AND
TECHNICAL COMMITTEES**

AGENDA

COMMITTEE MEMBERS

AIR QUALITY PLANNING COMMITTEE

**HAROLD BRAZIL, CHAIRPERSON
DIANE BAILEY
EMILY DRENNEN
IRVIN DAWID
FRED GLUECK
KRAIG KURUCZ
JOHN HOLTZCLAW, PH.D.
KEVIN SHANAHAN**

TECHNICAL COMMITTEE

**LOUISE BEDSWORTH, PH.D., CHAIRPERSON
SAM ALTSHULER, P.E.
ROBERT BORNSTEIN, PH.D.
WILLIAM HANNA
STAN HAYES
NORMAN A. LAPERA
JOHN HOLTZCLAW, PH.D.**

**TUESDAY
OCTOBER 12, 2004**

**7TH FLOOR BOARD ROOM
9:00 A.M.**

1. Call to Order – Roll Call

2. Public Comment Period

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3. The public has the opportunity to speak on any agenda item. All agendas for Committee meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Committee's purview. Speakers are limited to five minutes each.

3. Approval of Minutes:

- (a) *Air Quality Planning Committee Meeting of August 3, 2004*
- (b) *Technical Committee Meeting of August 4, 2004*

4. Discussion of Vehicles and Fuels

(A) The Role of Advanced Technology Vehicles in Improving Air Quality and Reducing Greenhouse Gases

John Boesel, President and Chief Executive Officer for WestStart-CALSTART, will review how advanced vehicle technology can reduce both criteria and greenhouse gas emissions. Among the technologies featured in the presentation will be hybrid electric, hydraulic hybrid, fuel cell, alternative fuel engines, and lightweight materials.

(B) Alternative Fuels Now... and in the future

Mike Jackson, Director, TIAX LLC, will discuss the emission and energy displacement benefits of currently available alternative fuels, and possibilities for future technologies.

5. Discussion of Advisory Council Activities

The Committee will review the Council's activities this year with particular attention to evaluating the Council's role and effectiveness, Council procedures and Councilmember development.

6. Committee Member Comments/Other Business

Committee members, or staff, on their own initiative, or in response to questions posed by the public, may ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting on any matter or take action to direct staff to place a matter of business on a future agenda.

7. Time and Place of Next Meeting

At the call of the Chairs.

8. Adjournment

CONTACT CLERK OF THE BOARDS - 939 ELLIS STREET SF, CA 94109

(415) 749-4965
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities notification to the Clerk's Office should be given in a timely manner, so that arrangements can be made accordingly.

HB/LB:je

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

CLERK OF THE BOARDS OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

OCTOBER 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i> - CANCELLED	Wednesday	6	9:45 a.m.	Board Room
Advisory Council Joint Air Quality Planning & Technical Committees	Tuesday	12	9:00 a.m.	Board Room
Board of Directors Legislative Committee <i>(Meets on an as needed basis)</i>	Wednesday	13	9:30 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	14	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	20	9:45 a.m.	Board Room
Advisory Council Public Health Committee	Monday	25	1:30 p.m.	Room 716
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Wednesday	27	9:45 a.m.	4 th Floor Conf. Room

NOVEMBER 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	3	9:45 a.m.	Board Room
Board of Directors Public Outreach Committee <i>(Meets 2nd Monday every other Month)</i>	Monday	8	9:45 a.m.	4 th Floor Conf. Room
Advisory Council Executive Committee	Wednesday	10	9:00 a.m.	Room 716
Advisory Council Regular Meeting	Wednesday	10	10:00 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	17	9:45 a.m.	Board Room

November 2004 Calendar continued on next page

NOVEMBER 2004 (Continued)

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Stationary Source Committee <i>(Meets 4th Monday every other Month)</i>	Monday	22	9:30 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Wednesday	24	9:45 a.m.	4 th Floor Conf. Room

DECEMBER 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	1	9:45 a.m.	Board Room
Advisory Council Air Quality Planning Committee	Tuesday	7	9:30 a.m.	Room 716
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	9	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	15	9:45 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Wednesday	22	9:45 a.m.	4 th Floor Conf. Room
Board of Directors Executive Committee <i>(Meets 5th Wednesday of Months that have 5 Wednesdays)</i>	Wednesday	29	9:30 a.m.	4 th Floor Conf. Room

MR:hl
10/4/04 (3:15 p.m.)
P/Library/Calendar/Moncal

AGENDA NO. 3a

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council
Air Quality Planning Committee Meeting
1:30 p.m., Tuesday, August 3, 2004

- 1. Call to Order – Roll Call.** 1:41 p.m. Quorum Present: Harold Brazil, Chairperson, Irvin Dawid, Emily Drennen, Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz. Absent: Kevin Shanahan.
- 2. Public Comment Period.** There were none.
- 3. Approval of Minutes of June 15, 2004.** Dr. Holtzclaw moved approval of the minutes; seconded by Mr. Kurucz; carried unanimously.
- 4. District's Ozone Control Strategy.** Chairperson Brazil called for discussion on the District's Ozone Control Strategy. The following points were made in discussion of the Further Study Measure (FSM) on biodiesel:
 - a) some transit agencies consider biodiesel impractical as it entails a loss of warranty protection on vehicle engines. An AC Transit biodiesel demonstration project on buses revealed many engine breakdowns. Biodiesel does not major particulate matter (PM) reductions, but the extent of reductions in emission of NOx is less impressive. (Brazil)
 - b) biodiesel is being demonstrated in a refuse truck fleet in Berkeley and may be more applicable to this type of fleet rather than to an urban transit fleet. (Dawid)
 - c) the feasibility of this FSM will include evaluation of potential feed stock sources and several bench tests on various types of equipment to ascertain emission benefits. The District will evaluate emulsified fuel as well. (Henry Hilken, Environmental Planning Manager)
 - d) keeping fuel emulsified for a stand-by field generator can be costly and impractical. (Kurucz)
 - e) the purpose of alternative fuels is to reduce this country's dependence on petroleum. Biodiesel is also less polluting to produce than ethanol. (Dawid)

The following points were made in discussion of indirect source mitigation:

- (a) the San Joaquin Valley air district is considering a rule that would require a permit on land-use developments with certain types of air quality impacts and thereby provide an incentive for sound development. The District will closely track the rule given the potential for litigation from the building industry. State law requires that a nexus exist between a fee and the associated pollution mitigation. The District will continue to advocate Smart Growth. (Hilken)
- (b) four years ago, this Committee reviewed the District's indirect source mitigation authority in parking cash-out and urban heat island programs. (Glueck)

- (c) the Bay Area is much more Smart Growth and transit oriented than it was two decades ago. A number of years ago the Metropolitan Transportation Commission (MTC) analyzed an alternative transit scenario that included denser development, and parking cash-out, etc. The results from that alternative when compared with the preferred regional transportation plan scenario Regional Transportation Plan showed greater reductions in driving by 8%, in congestion by 15%, and in emission reductions by 7-8%. Since then, the Association of Bay Area Governments (ABAG) has conducted more compact projections. A repeat of the 1994 projections by MTC showed fewer land-use savings because of demographic changes and more compact projections. (Holtzclaw)
- (d) despite such projections from MTC and ABAG, land-use remains fragmented in the Bay Area with its 101 cities and nine counties. Despite transportation control measures (TCMs) and smart growth strategies, decision-making nevertheless remains with local entities. (Dawid)
- (e) congestion acts as an educator and motivator toward Smart Growth; and planning grants are an effective way of providing communities with input. (Holtzclaw)
- (f) The District should use its financial influence in grant allocation as a motivator to get cities to reduce trips and vehicle miles traveled (VMT), and also to encourage Smart Growth. (Glueck)

Chairperson Brazil stated the Committee has so far identified two issues in its discussion. The first concerns the FSM on alternative fuels, and the second advocates getting regional planning assistance for local planners and to promote Smart Growth. Mr. Glueck suggested that the District be more aggressive in communicating with and educating local planners. Mr. Dawid stated that the District should also comment on controversial projects from a regional perspective.

Mr. Hilken replied that the District's comments in environmental review primarily concern major projects. However, having input at the general plan or specific plan level is better because it occurs earlier in the process. He added that the District has a project endorsement process in which criteria on density and access would be discussed in comment letters. The Committee could comment on and prioritize the items set forth in TCM No. 15. Also, the Transportation Fund for Clean Air provides extra points for the implementation of TCMs. Mr. Kurucz opined that influence on traffic locally and regionally is also achieved through setting forth appropriate categories of review in proposals that come to local decision-makers.

Mr. Hess observed that the Committee's comments emphasize the implementation of TCM No. 15. The Council's assistance in communicating information to local planners and governments in the nine Bay Area counties would also be very useful. A couple of years ago, District staff and Councilmember Hayes made presentations to the planning departments of local entities on urban heat island mitigation. Mr. Hess suggested that the Committee consider ways of implementing TCM No. 15 after the Ozone Control Strategy is adopted. It would get local entities involved in applying regional principles locally.

Chairperson Brazil suggested the Committee include in its formal recommendations that Council members attend meetings with local planners. Mr. Hess stated these meetings would combine staff and the Council, and emphasize woodsmoke abatement, urban heat islands, Smart Growth and the Spare the Air program. Mr. Glueck suggested the Committee keep in mind that such efforts do not have to be limited to redevelopment and planning departments but could also include major developers and their planning staff. If the latter make the appropriate proposal to the local decision makers then the ideal planning categories would already be incorporated in project development.

After further discussion, Mr. Kurucz moved that the Committee adopt the following recommendations; seconded by Dr. Holtzclaw; carried unanimously:

The Advisory Council agrees that the District staff has selected appropriate measures:

- 1. for review and adoption as control measures or further study measures.*
- 2. as transportation control measures.*
- 3. from other Districts for review and adoption as control measures or further study measures.*

The Council also has the following line items that it further wishes to comment on in the Plan:

- 1. The District include a FSM for alternative fuels, specifically including but not limited to emulsified, ethanol, biodiesel and other fuel types. The District should take into account their applicability under existing and future technologies.*
- 2. The District and Council work in concert to explore the local and regional implementation of items identified in TCM No. 15.*

The Committee agreed that the implementation of TCM No. 15 should be the primary task of its work plan for next year.

- 5. Committee Member Comments/Other Business.** There was brief discussion on pending legislation proposing the elimination of exemption for vehicles 30-years and older in the state's Smog Check program.
- 6. Time and Place of Next Meeting.** 9:30 a.m., Tuesday, October 12, 2004, 939 Ellis Street, San Francisco, CA 94109.
- 7. Adjournment.** 3:25 p.m.

James N. Corazza
Deputy Clerk of the Boards

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council
Technical Committee Meeting
1:30 p.m., Wednesday, August 4, 2004

1. **Call to Order – Roll Call.** 1:40 p.m. Quorum Present: Louise Bedsworth, Ph.D., Chairperson, Sam Altshuler, Bob Bornstein, Ph.D., William Hanna, John Holtzclaw, Ph.D., Norman A. Lapera, Jr. Absent: Stan Hayes.
2. **Public Comment Period.** Dr. Holtzclaw distributed for information the Air Quality Planning Committee's comments that it adopted yesterday on the District's Ozone Control Strategy.
3. **Approval of Minutes of June 3, 2004.** Dr. Holtzclaw requested that "Plan" be changed to "Plans" on line one of paragraph four on page three; and "Holtzclaw" to "Holtzclaw" on line one of the final paragraph on page 12. He moved the approval of the minutes as corrected; seconded by Dr. Bornstein; carried unanimously.
4. **District's Ozone Control Strategy.** Chairperson Bedsworth reviewed her July 7, 2004 memorandum entitled "Discussion of District Ozone Reduction Strategies and Planning." In discussion, Jean Roggenkamp, District Planning Division Director, and Phil Martien, Senior Atmospheric Modeler, proposed the following editorial suggestions to the memorandum:
 - a) Under *Ambient Trends* replace "significant" with "sufficient" in line six.
 - b) Under *District Modeling Efforts* in line two replace "is underestimating temperature, wind speed, and O₃" with "underestimates wind speed in some areas of the Bay Area, but performs well for Bay Area O₃." In line three, end the sentence at "disparities." Add a second sentence to read: "Based on comparisons to a fuel-based estimate, modeling inventories appear to underestimate VOC from on-road vehicles in the Bay Area." Append a new bullet to read: "The model underestimates temperatures and ozone in the San Joaquin Valley." In the next to last bullet, line two of page two, replace "affect" with "reduce and may even increase."
 - c) Under *EMFAC2002* insert "NO_x" before "emissions" in line one and add at the end of that sentence "especially in the San Joaquin Valley. NO_x emissions from heavy-duty diesel sources are not well represented." In line five, replace "weighted by reactivity" with "speciated by EMFAC." In line six, replace "Model" with "EMFAC."
 - d) Under *NO_x Control Measures*, on line nine add to the third sub-bullet " , unless heavy-duty diesel is specifically targeted."
 - e) Under *Key Findings*, on line nine under No. 2(b) after "mobile sources" add "including light-duty mobile." Delete 2(c) entirely. End the first sentence of No. 5 "Monday." Replace "but it is not" with "it is" and replace "or" with "and" prior to "activity."

Replace “are well understood” with “especially for heavy-duty diesel sources, need to be more accurately represented in modeling inventories on these days.”

Chairperson Bedsworth called for public comment, and the following individual came forward:

Steve Ziman
ChevronTexaco Energy Technology Company
Richmond, California

stating it will be necessary to review the modeling simulations from the Central California Ozone Study (CCOS) and to assess the analyses of data relative to the ozone episodes before firm conclusions about the ozone control strategy can be reached. Smog algorithms can help to assess the benefits and disbenefits of each ozone precursor, along with ozone response surface runs on the base case to see how the model responds to the reduction of each precursor. While NO_x concentrations decrease downwind it would be helpful to know what the active volatile organic compounds (VOCs) are downwind and if fresh NO_x will react to them. These dynamics need further review.

In response to Committee member comments that the text should recognize improved model performance, Ms. Roggenkamp noted that while some information has been provided today, further work is needed for the technical analysis. Control measures for the ozone strategy will have to be based on the modeling results, but these have not yet been completed.

The Committee discussed the text and reached consensus on the following modifications:

Under *Relevant Meetings & Topics* add “on ozone planning within the last year” and include today’s meeting in the chronology.

Add a heading to immediately follow the above heading entitled *Committee Findings*.

Change *Ambient Trends* to *Observed Trends*. In the first bullet add “one hour” before “standard.” In the second bullet, recognize the District’s successful work in targeting the most reactive VOCs, in light of longer reaction times and the corresponding impact on inter- and intra-basin transport. Thematically combine the third and fourth bullets with their focus on temperature and include that in the sixth bullet on meteorological conditions, indicating: “Maximum ozone levels in the Bay Area are very close to the one-hour federal standard. Thus, attainment is highly susceptible to extreme meteorological conditions, such as extension of a sustained (2-3 days) inland regional high over the Bay Area that impedes on-shore breeze flow and results in higher than normal temperature, maximizes UV and lower mixing depth.” Delete the fifth bullet on design values.

Under *District Modeling Efforts* indicate that they are “reproducing observed ozone patterns during exceedances periods, but additional efforts are needed to understand all major interactions between emissions, modeling, and chemistry.”

Under *Control Measures*, incorporate the staff’s proposed edit on how certain NO_x measures may increase ozone locally. Add a second sentence to indicate: “But, these measures could reduce ozone in the Central Valley.” In the third bullet delete “Need” and insert “Many further reductions”; and delete “that” prior to “are from sources under the jurisdiction of CARB and EPA.”

Place the text included under the *EMFAC 2002* heading under *District modeling efforts* with these modifications: (a) Add the new bullet suggested above by staff on fuel-based estimates. (b) To the end of the first bullet add “on-road heavy duty diesel vehicles.” (c) Conclude the second bullet at “2000.” (d) Replace “model” with “EMFAC” in the fourth bullet.

Change *NOx Control Measures* to *Control Measures*, and (a) delete the first bullet; (b) delete the second sub-bullet from the second bullet; (c) add a statement indicating that “previous modeling and data analysis indicates that, in the Bay Area, VOC reductions are more effective in reducing peak ozone concentrations than NOx reductions. However, ongoing modeling and data analysis will determine if this is still the case.”; (d) add: “Changes in NO:NO₂ ratios in diesel vehicle exhaust could change the importance of NOx reductions and ozone chemistry.” This will account for the need to distinguish nitrogen oxide (NO) from nitrogen dioxide (NO₂) emissions as these relate to ozone formation from diesel engine after-treatment technology.

Replace *Findings* with *Recommendations for Further Study*, and note that these are based on the entirety of *Committee Findings* outlined earlier in the document. The text should read as follows:

The District should continue to improve model performance, particularly in the following areas:

- *More accurately represent emissions from heavy duty diesel vehicles,*
- *Characterize NO and NO₂ emission fractions from diesel vehicles and hydrocarbon speciation more generally.*

Apply the improved model to understand:

- *Inter- and intra-basin transport issues,*
- *Emission reductions scenarios, with particular emphasis on the impact of the relative reduction of VOC and NOx emissions, and*
- *Impacts of various urbanization growth patterns.*

Many of the “low hanging fruit” have been picked. The District needs to place continuing pressure on CARB and EPA to pass stringent regulations over sources outside the District’s jurisdiction.

Mr. Hanna moved the Committee adopt the text as revised for forwarding to the full Council on September 8; seconded by Mr. Altshuler; carried unanimously.

5. Committee Member Comments/Other Business. There were none.

6. Time and Place of Next Meeting. 9:30 a.m., Tuesday, October 12, 2004, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment. The meeting adjourned at 4:15 p.m.

James N. Corazza
Deputy Clerk of the Boards

:jc