



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ADVISORY COUNCIL TECHNICAL COMMITTEE

AGENDA

COMMITTEE MEMBERS

LOUISE BEDSWORTH, PH.D., CHAIRPERSON
ROBERT BORNSTEIN, PH.D.
STAN HAYES
NORMAN A. LAPERA

SAM ALTSHULER, P.E.
WILLIAM HANNA
JOHN HOLTZCLAW, PH.D.

THURSDAY
JUNE 3, 2004

4TH FLOOR CONF. ROOM
9:30 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 Joint Technical & Air Quality Planning Minutes of April 6, 2004**
4. **Presentation on EMFAC 2002**

Amir Fanai, Senior Air Quality Engineer, Planning Division, will provide a presentation on EMFAC 2002, its use in ozone attainment planning, and some problems affecting the current planning process.

5. **NO_x Controls and Ozone Formation**

Dr. Saffett Tanrikulu, Manager of Research & Modeling in the Planning Division, will provide a presentation on NO_x controls as they relate to ozone formation in the Bay Area.

6. **Discussion of Possible Committee Input on Cumulative Risk Assessment**

7. 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.

8. Time and Place of Next Meeting

At the call of the Chair.

9. 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.

LB:jc

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

MAY 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Monday	17	9:45 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesdays each Month)</i>	Wednesday	19	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	20	9:30 a.m.	Board Room
Regional Agency Coordinating Committee Meeting <i>(Meets 3rd Friday every other Month)</i>	Friday	21	1:30 p.m.	MTC 101 Eighth Street Oakland, CA 94607
Board of Directors Stationary Source Committee <i>(Meets 4th Monday every other Month)</i>	Monday	24	9:30 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month) – CHANGED TO MONDAY, MAY 17TH -</i>	Wednesday	26	9:45 a.m.	4 th Floor Conf. Room

JUNE 2004

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Air Quality Planning Committee <i>(CHANGED to June 15th)</i>	Tuesday	1	9:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesdays each Month)</i>	Wednesday	2	9:45 a.m.	Board Room
Advisory Council Technical Committee	Thursday	3	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	10	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Public Outreach Committee <i>(Meets 2nd Monday every other Month)</i>	Monday	14	9:45 a.m.	4 th Floor Conf. Room

(June 2004 Calendar continued on next page)

JUNE 2004 (Continued)

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Air Quality Planning Committee	Tuesday	15	9:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesdays each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month) – CANCELLED -</i>	Wednesday	23	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	30	9:45 a.m.	4 th Floor Conf. Room

JULY 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	7	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	8	9:30 a.m.	4 th Floor Conf. Room
Advisory Council Executive Committee	Wednesday	14	9:00 a.m.	Room 716
Advisory Council Regular Meeting	Wednesday	14	10:00 a.m.	Board Room
Advisory Council Public Health Committee	Monday	19	1:30 p.m.	Room 716
Board of Directors Regular Meeting <i>(meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	21	9:45 a.m.	Board Room
Board of Directors Stationary Source Committee <i>(Meets 4th Monday every other Month)</i>	Monday	26	9:30 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday each Month)</i>	Wednesday	28	9:45 a.m.	4 th Floor Conf. Room

MR:mr
5/17/04 (1:16 p.m.)
P/Library/Calendar/Moncal

AGENDA NO. 3

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

DRAFT MINUTES

Advisory Council Regular Meeting
Joint Meeting of the Technical and Air Quality Planning Committees
9:30 a.m., Tuesday, April 6, 2004

1. **Call to Order – Roll Call.** Chairperson Brazil called the meeting to order at 9:32 a.m. Air Quality Planning Committee Members present: Harold Brazil, Chairperson; Irvin Dawid, Emily Drennen, Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan. Technical Committee Members present: Louise Bedsworth, Ph.D., Sam Altshuler, P.E., Stan Hayes, John Holtzclaw, Ph.D., Norman A. Lopera, Jr. Technical Committee Members absent: Robert Bornstein, Ph.D., William Hanna.
2. **Public Comment Period.** There were none.
3. **Approval of Minutes:**
 - A. **Air Quality Planning Committee – February 3, 2004.** Mr. Kurucz moved approval of the minutes; seconded by Dr. Holtzclaw; carried unanimously.
 - B. **Technical Committee – February 24, 2004.** Dr. Bedsworth requested that “feasible” be added after “technically” in the second bullet item of paragraph three on page two. Mr. Hayes requested that “may” replace “would” in line two of paragraph six on page three. Mr. Hayes moved approval of the minutes as corrected; seconded by Dr. Holtzclaw; carried, with Mr. Altshuler abstaining.
4. **2004 Ozone Strategy – Preliminary Control Measure Descriptions.** Henry Hilken, Air Quality Planning Manager, presented “Bay Area 2004 Ozone Strategy: Preliminary Draft Control Measure Descriptions.” The Strategy will address both state and federal air quality planning requirements and contains stationary, mobile and transportation control measures, as well as miscellaneous and further study measures. Input on over 400 measures initially reviewed was obtained from the Ozone Working Group, the public, other air districts, the members of the Board and Council, and previous air quality plans. Staff focused on mobile and stationary source measures that can be implemented through regulation, incentive and educational efforts. The Metropolitan Transportation Commission (MTC) has taken the lead on evaluating transportation control measures.

Dan Belik, Rule Development Manager, reviewed the preliminary stationary and mobile source measures in the Strategy, noting that those that concern boilers with 5-10 MMBTU/hr, large water heaters and stationary gas turbines will reduce the transport of nitrogen oxide (NO_x). Other measures emerged from the further study measures in the 2001 ozone plan and concern refinery flares, marine loading operations, organic liquid storage tanks, pressure relief devices, refinery wastewater systems and low emission vehicles.

Several additional draft stationary and mobile source measures considered feasible are under internal review and will be presented at the next meeting of the Ozone Working Group. These include gasoline bulk terminals and bulk plants, polyester resin operations, graphic arts operations, and model ordinances for green contracting and truck idling.

Mr. Hilken stated that the draft transportation control measures (TCMs) in the Strategy have been developed and evaluated in concert with MTC. Many were derived from the 2000 Clean Air Plan, and include voluntary employer based trip reduction, transit improvements in bus, rail and ferry service, improvements to transportation facilities, bicycle and pedestrian improvements, pricing and land-use strategies. TCMs that are still under development include regional and interregional rail service, youth transportation, freeway traffic management, trip reduction services, inter-mittent control measures, public education and clean air vehicle demonstration projects.

Potential further study measures include architectural coatings and solvents, back-up diesel generators, cooling water from coke cutting, cooling tower emissions, composting emissions, food product manufacturing/processing, free transit on Spare the Air days, glass melting furnaces, solvent limits based on reactivity, refinery wastewater ponds, and others.

Messrs. Hess, Hilken and Belik replied to questions from the Council members, as follows:

- a) The aggregate estimate of emission reductions from the draft stationary and mobile source measures in the Strategy are 4 tons per day (tpd) of reactive organic compounds (ROG) and 6 tpd of NOx. The baseline ROG emissions reduction from 2001 to 2006 is 121 tpd including California Air Resources Board (CARB) mobile source measures. Estimated emission reductions from the TCMs are not yet available. CARB is pursuing controls on emissions from off-road diesel engines and the emission reductions from these measures will increase. (Hayes)
- b) The Council's review of Urban Heat Islands and Smart Growth two years ago inspired the green contracting ordinance. Council members have participated with the staff in discussing these concepts with local governments. The TCM on local land-use development will provide a mechanism for further work on land-use issues. The Association of Bay Area Governments (ABAG) has adopted the projections based on the recent Smart Growth visioning process for the Bay Area. MTC will assess a transportation scenario that will be based on that Smart Growth vision for this region. (Dawid)
- c) The Strategy will account for emission reductions from the Enhanced Smog Check program. This grew out of a further study measure from the 2001 Ozone Plan. (Glueck)
- d) The low emission vehicle control measure focuses on obtaining reductions from on-road, medium and heavy-duty vehicles, and reflects the District's program work in the Transportation Fund for Clean Air (TFCA) and Carl Moyer programs. (Bedsworth)
- e) Staff welcomes Council assistance in being referred to the staff of the University of California at Berkeley that are associated with the forthcoming Transportation Alternative Study. This concerns establishing a program using Segway machines, bicycles and electric bicycles at the Pleasant Hill BART Station for use by employees at nearby businesses. Coordination with the East Bay Regional Park District in increasing the use of its 11,000 miles of bike trails to reduce vehicle traffic is also appreciated. (Lapera)

- f) The \$2 million in anticipated funding for City Car Share programs will be included in the Local Land-use Planning and Development TCM. The TFCA has funded City Car Share in Alameda County. City Car Share can be supported through funding, publicity, marketing, and working with cities to obtain more parking for new development. (Drennen)
- g) Ozone is a regional pollutant and reducing precursors in one area will have impacts elsewhere within the District. Some control measures also have local benefits. One future study measure will evaluate cumulative impacts of toxic air contaminants in a specific community. This proposal will be reviewed by the Public Health Committee. While the tools for conducting cumulative risk assessment are not yet available, there are efforts to develop these at both the state and federal levels. (Drennen)
- h) The Bay Area Alliance for Sustainable Development will meet on May 13 in Oakland and will address case studies of cities that have implemented Smart Growth. (Dawid)
- i) Notwithstanding the information that the Oakland Police department is sponsoring legislation that would require the operator of a motorized scooter have a driver's license, CARB has sole regulatory authority over motorized scooters. (Lapera)
- j) The District's Spare the Air Coordinator provides Spare the Air day guidelines and to participating employers and governments. The Clean Air Cities and Counties Program and the Clean Air Consortium also conduct outreach to local governments. Staff welcomes the suggestion to further such outreach to park and school districts. (Lapera)
- k) The control measure on spray booths addresses facilities with emissions that are close to the threshold above which Best Available Control Technology (BACT) is required. The number of companies using water-based technology in the South Coast AQMD is not known. The measure would accommodate low emission technologies. (Kurucz)
- l) Regarding the proposed doming of refinery liquid storage tank roofs, staff is currently discussing with the refineries as to how many tanks have the improved "zero gap" flat roof seals. These will be factored into future emission reduction estimates. Staff is acquiring data from the South Coast AQMD on refinery dome installation costs. (Kurucz)
- m) In accounting for the cost of enforcing a rule in the overall cost-effectiveness calculation, the District assesses cost estimates through discussions with internal working groups. Enforcement is continually refined and improved in its efficiency. (Shanahan)
- n) Regarding the enforcement and permitting burden associated with the control measure on small boilers, the suggestion that its implementation could take place through building code modification or a rule concerning new construction. Manufacturing standards that govern water heaters and central furnaces have gradually reduced emissions over time. The further suggestion that staff coordinate with building departments in the Bay Area to locate boilers greater with greater than 10 million BTUs would establish an additional mechanism for equipment identification. (Shanahan)
- o) The District's calculation method for forecasting Spare the Air days accounts for the negative effects of morning NO_x emissions. However, emission inventories may not be used to determine progress toward attainment. One of the episodes that will be addressed by the District's photochemical modeling will concern the weekday/weekend ozone effect. The recent backsliding experienced by the South Coast AQMD with regard to ozone attainment is likely due to a combination of diverse factors. (Altshuler)

- p) Social changes achieved through Smart Growth may increasingly constitute the future focus of emission reduction strategies. The most significant stationary control measures have already been adopted. CARB and the Environmental Protection Agency (EPA) need to achieve more reductions from off-road and on-road mobile sources. The Regional Agency Coordinating Committee, which is comprised of members of the Boards of the District, MTC and ABAG, will also address such regional planning issues. MTC's Regional Transportation Plan will examine a Smart Growth land-use scenario. The District, MTC and ABAG recently discussed commercial and residential parking requirements, as well as the possible development of an inventory of best practices for reference by planning staff. Some of these best practices are included in TCM No. 16. (Glueck)
- q) Staff will consider the suggestions to establish shuttle bus feeder service between the 22nd Street Caltrain Station to the 16th and 24th Street BART stations, and between the downtown Caltrain depot and one of the BART stations on Market Street; as well as to combine bike pool programs with station car programs at BART stations. (Drennen)
- r) The application of carpool and express bus lanes on freeways to bus only lanes in urban centers could be considered under the category of improved transit service. (Drennen)
- s) The suggestion to expand the Commuter Check program to lower income populations should be referred to MTC, with the assistance of Chairperson Brazil. (Drennen)
- t) The suggestion to establish 24-hour free transit for high-occupancy vehicles for the Bay Bridge is not new. However, the major incentive is to avoid queue time at the toll plaza rather than the toll. The District continues to evaluate various pricing strategies for the Bay Area bridges and has worked with Senator Perata on this issue. (Drennen)
- u) Parking pricing measures that would propose to derive a fee from each parking stall could be considered as an indirect source mitigation fee but would prove difficult to sell. The City of San Jose is looking into assessing impact fees for new development. (Dawid)
- v) The practice of European businesses of using bicycles and tricycles instead of trucks to deliver lightweight materials in downtown areas might be considered by United Parcel Service, Pedal Express in the East Bay, and San Francisco bike messengers. (Holtzclaw)
- w) Suggestions are welcome on staggering working hours to affect time of day emissions to reduce the buildup of ozone precursors that begins in the early morning. (Hayes)
- x) Staff will evaluate the provision of free parking by the City of San Jose to any hybrid vehicle purchased in San Jose, as well as the extent to which parking incentives may be derived from such programs for hybrid or alternative fuel vehicles. Staff also notes the observation that formaldehyde is more reactive than other organics, and NO₂ is more reactive than NO_x, and that the manufacture of natural gas over diesel bus fleets in China and India leads to fleets with less reactive exhaust emission profiles. (Altshuler)
- y) Financial incentives to reduce mobile source emissions are offered by the TFCA, and stationary source emissions reduced beyond a permit requirement or standard may be banked to offset emissions from future facility expansion. (Glueck)
- z) Staff agrees that diesel bus retrofit programs are likely to be considered by the Governor to be more of a job-oriented program for California than a clean air initiative, even if some of the incentive funding is provided through the Carl Moyer program. (Shanahan)

Chairperson Brazil called for public comment, and the following individuals came forward:

Kevin Buchan, Western States Petroleum Association, stated the discussions between the District and the refineries on the future study measures were constructive, and the refineries do not oppose the proposed rules. Further assessments are needed of the cost of controls and the emission inventory for the marine loading rule. The impact of doming a refinery tank on egress and entry during seal inspections also requires further evaluation. Emission estimates from pressure relief devices are based solely on events and not on daily emission averages. For the proposed wastewater treatment rule, the working group process was also successful.

Stephanie Corcoran, Chemical Engineer, Valero Refining Company, Benicia, stated that the emission estimate of 13.78 tpd from flares does not reflect current emission rates, which are now estimated for the refineries collectively at 0.5 tpd of non-methane hydrocarbons. Also, Bay Area refinery flare operating guidelines are consistent with guidelines provided by the American Petroleum Institute (API) and the recommendations of the American Society of Mechanical Engineers (ASME). The Occupational Safety & Health Administration (OSHA) recognizes that refinery flares are important devices for fire prevention and operational safety. The District should not consider adopting any control measure for flares that has not been approved by the API, ASME and OSHA.

Mr. Belik noted that the estimate of 13.78 tpd derives from the 2001 Ozone Plan. Staff agrees that over half of this tonnage has been eliminated, although the refinery estimate of half a ton per day has not been agreed upon. Staff is working to quantify those emissions. A lower baseline emission estimate will be included in the final iteration of the Ozone Strategy.

Mr. Altshuler urged that speciated gas stream data be obtained from refineries to identify and reduce the streams with the more reactive hydrocarbons, as well as those with the greatest amount of highly reactive NO_x constituents, such as NO, NO₂, formaldehyde and benzene.

5. **Committee Member Comments/Other Business.** Mr. Hayes requested that the cumulative risk assessment issue that is now before the Public Health Committee be referred to the Technical Committee as a discussion topic on the agenda for the next meeting. Mr. Kurucz made the same request for the agenda of the next Air Quality Planning Committee meeting. After discussion, Chairpersons Brazil and Bedsworth directed that this topic be placed as a discussion item on the next agendas for the meetings of their respective Committees.
6. **Time and Place of Next Meeting.** Technical Committee, 9:30 a.m., Thursday, June 3, 2004. Air Quality Planning Committee, 9:30 a.m., June 15, 2004, 939 Ellis Street, San Francisco, California 94109.
7. **Adjournment.** 12:30 p.m.

James N. Corazza
Deputy Clerk of the Boards