

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

ADVISORY COUNCIL
TECHNICAL COMMITTEE
10:00 a.m., Tuesday, April 1, 2003
7th Floor Board Room

Robert Harley, Ph.D., Chairperson, Sam Altshuler, P.E., William Hanna,
Stan Hayes, Norman Lopera, Robert Sawyer, P.E., Ph.D.

AGENDA

1. Call to Order – Roll Call

2. Public Comment Period

The public has the opportunity to speak on any agenda item. All agendas for Advisory Council 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 of February 4, 2003

4. Refinery Flares

(A) Staff Presentation on Bay Area Refinery Flares

District staff will provide a presentation on the process used to calculate emission estimates from Bay Area refinery flares.

(B) Industry Perspectives on Bay Area Refinery Flares

Kevin Buchan, Environmental Coordinator, Western States Petroleum Association, will address the Committee on the past and current practices regarding use of flares at Bay Area refineries, combustion efficiency of flares, and hydrocarbon emission estimates.

5. 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.

6. Time and Place of Next Meeting

9:30 a.m., Thursday, May 29, 2003, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment

RH:jc

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

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- 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).

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
M A R C H 2 0 0 3

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting	Wednesday	5	9:45 a.m.	Board Room
Advisory Council Public Health Committee	Monday	10	1:30 p.m.	Board Room
Advisory Council Executive Committee	Wednesday	12	9:00 a.m.	Room 716
Advisory Council Regular Meeting	Wednesday	12	10:00 a.m.	Board Room
Board of Directors Mobile Source Committee - CANCELLED -	Thursday	13	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting	Wednesday	19	9:45 a.m.	Board Room
Board of Directors Stationary Source Committee	Wednesday	19	10:30 a.m.; or immediately following the Regular Board Meeting	Room 716
Advisory Council Air Quality Planning Committee	Tuesday	25	9:30 a.m.	Room 716
Board of Directors	Wednesday	26	9:30 a.m.	4 th Floor Conf. Room

MR:MR
3/12/03 (8:44 A.M.)

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CLERK OF THE BOARDS OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS
A P R I L 2 0 0 3

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Technical Committee	Tuesday	1	10:00 a.m.	Board Room
Board of Directors Regular Meeting	Wednesday	2	9:45 a.m.	Board Room
Board of Directors Legislative Committee	Wednesday	9	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee	Thursday	10	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Public Outreach Committee - CHANGED -	Monday	14	10:00 a.m.	4 th Floor Conference Room
Advisory Council Public Health Committee	Monday	14	1:30 p.m.	Board Room
Board of Directors Regular Meeting	Wednesday	16	9:45 a.m.	Board Room
Board of Directors Stationary Source Committee	Wednesday	16	Immediately following the Regular Board Meeting	Board Room
Regional Agency Coordinating Committee (RACC)	Friday	18	1:30 – 3:30 p.m.	MTC 101 Eighth Street Oakland, CA 94607
Board of Directors Public Outreach Committee	Monday	21	9:45 a.m.	4 th Floor Conference Room
Board of Directors Budget & Finance Committee	Wednesday	23	9:30 a.m.	4 th Floor Conference Room
Board of Directors Executive Committee	Wednesday	30	9:30 a.m.	4 th Floor Conference Room

MR:HL
3/20/03 (8:40 A.M.)
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Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT MINUTES

Advisory Council Technical Committee Meeting
9:30 a.m., Tuesday, February 4, 2003

1. **Call to Order – Roll Call.** 9:03 a.m. Quorum Present: Robert Harley, Ph.D., Chairperson, Sam Altshuler, P.E., William Hanna, Stan Hayes, John Holtzclaw, Ph.D., Norman Lapera, Robert Sawyer, Ph.D., P.E.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of December 3, 2002.** Mr. Altshuler requested: (a) deletion of the second sentence in paragraph three on page three and its replacement with “Dr. Harley indicated there was a large uncertainty in isoprene emission estimates.” and (b) addition of the following after the sentence in the same paragraph that ends with “scenarios.”: “Eucalyptus trees because of their tendency to grow tall may have a greater relative emission than some of the other isoprene emitting trees.” He moved approval of the minutes as amended; seconded by Mr. Hanna; carried.
4. **Discussion of Intermittent Ozone Control Strategies.** Peter Hess, Deputy Air Pollution Control Officer, stated that the District is seeking input on intermittent Spare the Air (STA) control measures to implement in the summer in the Livermore area. STA forecasts are made at 11:00 a.m. on the previous day and advisories are issued to an employer network with 1,700 employers and 70,000 employees as well as to the media. The Committee offered the following suggestions:
 - A. Free public transit on STA days.
 1. Evaluate the Metropolitan Transportation Commission’s analysis of providing free public transit to the public on such days (a Future Study Measure in the 2001 Ozone plan).
 2. Provide free transit to the STA Employer Network through transit vouchers. This would encourage greater participation in the program, while avoiding ridership and revenue reduction. Vouchers should target peak morning commute traffic since it is the most critical to ozone formation. The impact of voucher use in locations upwind of problematic attainment areas may be difficult to discern in modeling given broad commute patterns.
 - B. Enhance carpooling and ridesharing incentives:
 1. Acquire accurate estimates of the vehicle flow into the Bay Area over the Livermore pass.
 2. Assess atmospheric dynamics of the inversion and traffic congestion patterns and locations in the Livermore Pass area on high ozone days.
 3. Increase transportation alternatives for commuters from the Central Valley through enhanced carpool and rideshare incentives, as well as use of flex time through a voucher system.

C. Freeway Speed Limits:

1. Evaluate lowering the freeway speed limit on STA days to 55mph. Vehicular emissions are higher at high speeds. The freeway carrying capacity currently peaks at approximately 40 mph where vehicular emissions are also lowest.
2. Double speed limit fines on STA days because vehicular emissions are lower at lower speeds. Review MTC's analysis of the cost of additional highway patrol enforcement as a Future Study Measure in the 2001 ozone plan. Particular attention should be paid to application in the morning commute. Evaluate the extent to which traffic stops cause congestion through curiosity queues and increasing the likelihood of a rear-end collision.
3. Legalize the use of photo-radar or lasers to issue speeding tickets.

D. Bridge toll modification and congestion pricing:

1. Increase bridge tolls during peak commuter hours on the Bay Bridge, but also mitigate any delays of traffic flow due to possible motorist unfamiliarity with the altered tolls.
2. Include in the Environmental Impact Report associated with the forthcoming new Bay Bridge toll plaza an evaluation of intermittent control measures from a design perspective, i.e., address the context in which the metering lights on the Bay Bridge affect congestion.
3. Collect tolls from eastbound rather than westbound traffic on the Bay Bridge, and thereby change the time of commute traffic congestion from the morning to the afternoon.

E. Parking Policy Modifications:

1. Institute a STA Day Parking Surcharge in which employers that have free parking would charge employees for parking. Employers not in the Network would charge \$2.00 while participants would charge \$1.00. This would encourage greater participation in the STA Employer Network. In evaluating this proposal, reference should be made to research from the University of California on control measure elasticity.
2. Evaluate parking and congestion management at BART stations with regard to morning capacity and ease of access. Evaluate the air quality impact of a BART parking lot fee, which has been proposed for budgetary reasons and to eliminate parking lot misuse. Consider inviting a BART staff member for a presentation on this issue.
3. Allocate funds from bridge pricing and parking surcharges to the free transit vouchers.

F. HOV Lane Policy Modification:

1. Modify the number of HOV lanes the Bay Bridge during peak commute traffic.
2. Revise the HOV carpool eligibility number from three persons to two. Track pending legislation. Ascertain if Caltrans can modify HOV lane eligibility administratively.
3. Expand the time frame for HOV lane usage.
4. Compare with HOV lane policies in other air districts, including South Coast AQMD.
5. Modify "Fast Track" passes to provide lower rates for cleaner vehicles.

G. Augment the STA Employer Network.

1. Expand the present network to include a larger fraction of the Bay Area.
2. Evaluate STA survey data to ascertain if the STA message has an impact on behavior, and if so, if further guidance on intermittent control measures may be derived from it.
3. Continue to use roadway signage and the Amber Alert Network for posting STA messages.

H. Review East Bay Regional Park District (EBRPD) High Fire Danger Day program:

1. On high fire danger days, the EBRPD program puts into place standards and guidelines concerning smoking, barbecues, fires, and use of gasoline-powered engines by contractors in wildlife areas. These and other EBRPD measures may be incorporated into the STA program. Evaluate the list of high fire danger day guidelines for use in STA program.

2. When the District presents and reinforces the STA message with cities, counties, employers and educational institutions, it could provide a list of items to be implemented, tailored to specific situations and contexts. These could include encouraging employers to use only the cleanest vehicles; use of fleet vehicles until later in the day; delay until later in the day use of diesel engines at commercial painting and roofing projects; and delay until later in the day the filling of gasoline containers for lawnmowers and chain saws.
- I. Provide greater focus on hydrocarbon (HC) component of emission reductions in the Bay Area:
 1. Augment STA activities that reduce hydrocarbon emissions in areas upwind of ozone problem areas, with a particular focus on large employers.
 2. Augment HC monitoring. HC emission trends could be tracked to understand the impacts of certain measures on STA days. Evaluate potential for such measures to gain State Implementation Plan (SIP) credit, taking into account the difficulty posed by federal regulations which require that they be “permanent, enforceable and quantifiable.”
 3. Spread out/defer diesel truck traffic on Spare the Air weekdays into the weekend.
- J. Other Measures:
 1. Provide a free vehicle smog check on a STA Day. This would include a gas cap test.
 2. Address airports and airport parking as part of the STA message. Account for the impact of BART transit to SFO on displacing vehicular use and parking.
 3. Encourage cities to establish special bike streets/boulevards on STA days.
- K. Evaluate diurnal impacts on ozone formation of morning and evening commute peaks. The Technical Committee will review the first iteration of the photochemical modeling for the first episode in the 2004 Ozone Plan which is due in the next couple of months.

5. Consideration of Air Quality Planning Committee Referral on Vehicle Inspection & Maintenance (I&M). The Committee reached consensus on the following items, emphasizing throughout that the District should focus any special features of a Bay Area hybrid/enhanced I&M program on areas where HC emission reductions will have the most impact on ozone:

- (a) Institute a program of remote sensing “Smart Signs” with color codes (green, yellow, red) corresponding to HC emission levels. Failing vehicles would receive a letter from the District encouraging vehicle repair. The long-term data collected by the program would clarify the skewness of vehicle emissions. Smart Signs could be initially sited upwind of Livermore and then elsewhere in locations identified as appropriate by the 2004 Ozone Plan modeling runs.
- (b) Take measures to uniformly improve vehicle repairs throughout the region, and target emphasis on areas upwind of Livermore.
- (c) Evaluate the re-entry into the fleet of confiscated or abandoned vehicles that are donated to foundations. While such vehicles have to be smog checked upon change-of-ownership, the District could encourage that they be brought into the vehicle buy-back program instead.
- (d) Data collection for vehicular emissions modeling and evaluation of vehicle I&M should include Bureau of Automotive Repair random roadside surveys. The state Emission Factor Model (EMFAC) model should not be used to evaluate the I&M program.
- (e) To better identify gross polluting vehicles (GPVs), the results of the California Air Resources Board (CARB) study on the replacement of key emissions control components (catalytic converters, oxygen sensors and canisters) should be tracked. The preliminary results from this study are due for publication soon. A possible outcome would be improvement in the understanding of equipment failure modes that leads to improvement in repair diagnosis and quality.

- (f) Distinguish responsible from irresponsible vehicle owners and tailor an approach under a remote sensing program for each group. Positive incentives, such as rebates, should be provided to the former but denied to the latter.
- (g) Eliminate waivers for vehicles that are too expensive to fix, as these are the most problematic.
- (h) Endorse the recommendation to eliminate the 30-year rolling exemption at 1974. Further recommend that upon change-of-ownership, exempted vehicles should be pulled back into the I&M program and be made to meet the original manufacturer's emission specifications.

6. Consideration of Public Health Committee Referral on Particulate Matter Abatement. The Committee members offered the following remarks on the referred recommendations:

No. 1: lowering the threshold for triggering a Spare the Air Tonight advisory would impose another structure on the current PM planning process and, as staff has previously opined, trigger too many advisory notices and thereby potentially dilute the importance of the message.

No. 6: precedent for change-out of fireplaces upon the sale of a home can be found in Napa County's requirement to install a low-flow toilet in a home upon change-of-ownership. However, the change-out provision is optional and if some jurisdictions have included it in their ordinance, others that are considering it should be informed of this. The Committee endorsed the inclusion of an optional change-out provision in the model ordinance from a technical perspective as an additional means of reducing PM. Given the controversy with realtors when this provision was first proposed a number of years ago, staff has offered to contact the real estate industry prior to the March 12, 2003 Advisory Council Regular Meeting so that input from the affected industry on these recommendations may be obtained. The Advisory Council is charged with advising the Board of Directors on the air quality efficacy of its recommendations. The Board is free either to accept the recommendations or remand them to the Council for further review.

No. 9: Not all PM emissions have the same level of toxicity. This renders trading problematic. The omission of barbecues from the Spare the Air Tonight program may require further review. Staff has indicated that at present only heated grilling units are regulated by stack catalysts.

No. 10: The Committee has previously voiced its concerns over emissions of NO₂ from PM traps. The state retrofit program will install these traps on transit buses, garbage and fuel haulers, but it is not known precisely how many vehicles will be retrofitted. The Committee reached consensus that it lacked the full context necessary for rendering an opinion on the issue of PM trap retrofits and therefore it will offer no further comment on the matter.

7. Greenhouse Gas Emission Inventory. Chairperson Harley stated that on January 8, 2003 the Council referred to the Technical Committee the proposal from the Sonoma County Climate Protection Campaign that the District allocate \$25,000 to the Campaign, consider committing staff resources and establish the District as the hub for coordinating regional climate protection efforts.

Tom Addison, Legislative Analyst, noted that the state budget crisis will negatively impact the District's budget via reduction of subvention and possibly property tax revenues. The District believes there are air quality benefits to reducing greenhouse gas emissions (GGE) and praises Sonoma County's initiative and success in getting its local jurisdictions to calculate their GGE's. However, there is little coordination between the Campaign and the California Climate Action Registry established three years ago by Senator Byron Sher. The Registry establishes a system for local governments, private organizations and business corporations to calculate their GGE

footprint. It also provides accompanying software to calculate GGE emissions either from a narrow emission source sector or from a broader area by plugging in business information. The District would prefer that local governments avoid programmatic overlap by using the existing state program.

Mr. Altshuler stated that the Campaign should also have approached the Northern Sonoma County Air District for funding. Mr. Addison added that in discussion with the Campaign, District staff could not ascertain a precise allocation scheme for the funds the Campaign requested from the Bay Area AQMD.

Several committee members opined that the Campaign's approach is too narrow because government operations are but a small fraction of the GGE total within a locality. A comprehensive and regional approach to GGE emission inventorying is required. Moreover, if there is synergy with air quality management, the Registry should be the focal point for coordination. Mr. Addison added that the cities of San Francisco, San Jose and Berkeley are calculating their GGE footprint and will enter into the Registry independently. Dr. Holtzclaw stated that the GGE analyses of local jurisdictions should be consistent both in analytical categories and methodology. The Committee reached consensus that the Campaign, while a praiseworthy local effort, is neither coordinated sufficiently with other GGE inventory efforts in the region nor clearly enough connected with air quality management.

- 8. Committee Member Comments/Other Business.** Mr. Lopera stated the EBRPD and the District will meet on February 19 to discuss the fuel and air quality management issues associated with thinning a 900-acre eucalyptus grove in the East Bay Hills. Options include chipping the wood on site followed by vegetation management. Labor will be provided by crews from the Department of Corrections and supervised by the California Department of Forestry. The next step will be to coordinate participation with environmental groups.

Mr. Altshuler noted he would attend the California Truckers Association meeting from March 2-4, 2003 in Monterey, California. CARB Chair Dr. Alan Lloyd and others of his staff will provide several presentations on particulate matter.

- 9. Time and Place of Next Meeting.** 9:30 a.m., Tuesday, April 1, 2003, 4th Floor Conference Room, 939 Ellis Street, San Francisco, California 94109.

- 10. Adjournment.** 12:21 p.m.

Respectfully submitted by,

James N. Corazza
Deputy Clerk of the Boards