



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## ADVISORY COUNCIL REGULAR MEETING

WEDNESDAY  
NOVEMBER 10, 2004  
10:00 A.M.

SEVENTH FLOOR  
BOARD ROOM

### AGENDA

#### CALL TO ORDER

Opening Comments  
Roll Call

Elinor Blake, Chairperson  
Clerk

#### 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 Advisory Council 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 Council's purview. Speakers are limited to five minutes each.*

#### CONSENT CALENDAR

1. Approval of Minutes of September 8, 2004

#### PRESENTATION

2. Update on the Smog Check II Program for the Bay Area

*David Amlin, Manager, Engineering Section, Bureau of Automotive Repair (BAR) will provide a presentation on the update to the Smog Check II program for the Bay Area. There may also be discussion regarding recommendations made by the Advisory Council in 2003 concerning vehicle inspection and maintenance.*

#### COMMITTEE REPORTS

3. Report of the Joint Air Quality Planning & Technical Committee Meeting of October 12, 2004

Chairs Brazil  
and Bedsworth

4. Report of the Public Health Committee Meeting of October 25, 2004 Chair Weiner

*The Council will consider the Committee's recommendations regarding the broader application of optical fence line monitoring technology to refineries and chemical plants in the Bay Area.*

5. Report of the Executive Committee Meeting of November 10, 2004 Chair Blake

*The Council will vote on the Committee's recommendations for a slate of Officers for 2005.*

6. Reports from Council Members Who Attended the District's Ozone Strategy Community Meetings

*Councilmembers will report on community meetings recently held on the District's Ozone Attainment Strategy.*

7. Discussion of Feedback Regarding Advisory Council Activities in 2004

*The Council will discuss feedback received at the previous Committee meetings regarding ways for the Advisory Council to offer its expertise to the Board and staff, as well as materials for Council member orientation and education.*

#### **OTHER BUSINESS**

8. Report of the Executive Officer/APCO Jack Broadbent

9. Report of Advisory Council Chair Elinor Blake

10. Council Member Comments/Other Business

*Council or staff members 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 their own activities, provide a reference to staff about factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda.*

11. Time and Place of Next Meeting

*10:00 a.m., Wednesday, January 12, 2005, 939 Ellis Street, San Francisco, California 94109.*

12. Adjournment

EB:jc

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

**(415) 749-4965**  
**FAX: (415) 928-8560**  
**BAAQMD homepage:**  
**[www.baaqmd.gov](http://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.

**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**

**NOVEMBER 2004**

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting</b> ( <i>Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month</i> ) - CANCELLED	Wednesday	3	9:45 a.m.	Board Room
<b>Board of Directors Public Outreach Committee</b> ( <i>Meets 2<sup>nd</sup> Monday every other Month</i> )	Monday	8	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Advisory Council Executive Committee</b>	Wednesday	10	9:00 a.m.	Room 716
<b>Advisory Council Regular Meeting</b>	Wednesday	10	10:00 a.m.	Board Room
<b>Board of Directors Regular Meeting</b> ( <i>Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month</i> ) - CANCELLED	Wednesday	17	9:45 a.m.	Board Room
<b>Joint Policy Committee (JPC)</b>	Friday	19	10:00 a.m.	MTC 101 8 <sup>th</sup> Street Oakland, CA 94607
<b>Regional Agency Coordinating Committee (RACC)</b>	Friday	19	1:30 p.m.	MTC 101 8 <sup>th</sup> Street Oakland, CA 94607
<b>Board of Directors Stationary Source Committee</b> ( <i>Meets 4<sup>th</sup> Monday every other Month</i> )	Monday	22	9:30 a.m.	Board Room
<b>Board of Directors Nominating Committee</b>	Monday	22	Immediately following Stationary Source Committee Meeting	Room 716
<b>Board of Directors Budget &amp; Finance Committee</b> ( <i>Meets 4<sup>th</sup> Wednesday each Month</i> )	Wednesday	24	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Executive Committee</b> ( <i>Meets 5<sup>th</sup> Wednesday of Months that have 5 Wednesdays</i> )	Monday	29	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room

**DECEMBER 2004**

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting/Retreat</b> ( <i>Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month</i> )	Wednesday	1	9:45 a.m.	<b><u>Location:</u></b> Waterfront Plaza Hotel Regatta Room I Ten Washington Street Oakland, CA 94607

**December 2004 Calendar continued on next page**

## DECEMBER 2004 (Continued)

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Mobile Source Committee</b> <i>(Meets 2<sup>nd</sup> Thursday each Month)</i>	Monday	6	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Advisory Council Air Quality Planning Committee</b> – RESCHEDULED TO 12/16/04	Tuesday	7	9:30 a.m.	Room 716
<b>Board of Directors Mobile Source Committee</b> <i>(Meets 2<sup>nd</sup> Thursday each Month)</i> - RESCHEDULED TO 12/6/04	Thursday	9	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	15	1:30 p.m.	Board Room
<b>Advisory Council Joint Air Quality Planning &amp; Technical Committees</b>	Thursday	16	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Budget &amp; Finance Committee</b> <i>(Meets 4<sup>th</sup> Wednesday each Month)</i>	Wednesday	22	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Executive Committee</b> <i>(Meets 5<sup>th</sup> Wednesday of Months that have 5 Wednesdays)</i> – RESCHEDULED TO 11/29/04	Wednesday	29	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room

## JANUARY 2005

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	5	9:45 a.m.	Board Room
<b>Board of Directors Public Outreach Committee</b> <i>(Meets 2<sup>nd</sup> Monday every other Month)</i>	Monday	10	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Advisory Council Executive Committee</b>	Wednesday	12	9:00 a.m.	Room 716
<b>Advisory Council Regular Meeting</b>	Wednesday	12	10:00 a.m.	Board Room
<b>Board of Directors Mobile Source Committee</b> <i>(Meets 2<sup>nd</sup> Thursday each Month)</i>	Thursday	13	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	19	9:45 a.m.	Board Room
<b>Board of Directors Stationary Source Committee</b> <i>(Meets 4<sup>th</sup> Monday every other Month)</i>	Monday	24	9:30 a.m.	Board Room
<b>Board of Directors Budget &amp; Finance Committee</b> <i>(Meets 4<sup>th</sup> Wednesday each Month)</i>	Wednesday	26	9:45 a.m.	4 <sup>th</sup> Floor Conf. Room

MR:hl  
11/2/04 (9:50 a.m.)  
P/Library/Calendar/Moncal

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

**DRAFT MINUTES**

Advisory Council Regular Meeting  
10:00 a.m., Wednesday, September 8, 2004

**CALL TO ORDER** 10:09 a.m.

**Opening Comments** Chairperson Blake.

**Roll Call** Present: Elinor Blake, Chairperson, Sam Altshuler, P.E., Diane Bailey, Robert Bornstein, Ph.D., Louise Bedsworth, Ph.D., Jeffrey Bramlett, Harold Brazil, Irvin Dawid, Fred Glueck, Stan Hayes, John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan, Victor Torreano, Linda Weiner, Brian Zamora.  
Absent: Sanjiv Bhandari, Emily Drennen, William Hanna, Norman A. Lopera, Jr.,

**PUBLIC COMMENT PERIOD** There were no public comments.

**CONSENT CALENDAR**

**1. Approval of Minutes of July 14, 2004.** Ms. Bailey requested that she be listed as absent on page one under “Roll Call.” Mr. Altshuler stated that he would like to work with the Deputy Clerk to reword the text of the reference to a “little smog factory” under Item No. 1, and he moved approval of the minutes as amended; seconded by Mr. Bramlett; carried, with Mr. Hayes abstaining.

**COMMITTEE REPORTS**

**2. Report of the Air Quality Planning Committee (AQPC) Meeting of August 3, 2004.** Mr. Kurucz presented the AQPC’s recommendations on the District’s Ozone Control Strategy (OCS). These affirm the staff’s selection of appropriate control measures, urge the inclusion of a future study measure on alternative fuels, and suggest that the Council explore implementation of Transportation Control Measure (TCM) No. 15 regarding growth and transit planning. The Committee also encourages Council members to attend the District’s community meetings on the OCS. At the next Committee meeting, two guest speakers will provide presentations on alternate fuels. Chairperson Blake stated that, per direction from the Council’s Executive Committee this morning, the recommendations from the AQPC and Technical Committee on the OCS will be merged into one document. Mr. Hayes urged inserting the word “that” prior to Item Nos. 1 and 2. Dr. Bornstein added that a comma should be inserted prior to “which” in paragraph one. Chairperson Blake called for a voice vote on the AQPC recommendations and they carried unanimously by acclamation, as amended.

**3. Report of the Technical Committee Meeting of August 4, 2004.** Dr. Bedsworth stated that the Technical Committee also reviewed the OCS and made several findings and recommendations.

Dr. Bedsworth suggested changing “increase” to “increased” in the next to last line on page one. Mr. Hayes proposed that in the second sentence of the first bullet under “Control Measures” that the second sentence be replaced with “The relative magnitudes and health implications of these increases and decreases are not yet clear and await the completion of our modeling efforts.” Mr. Dawid suggested referencing TCM No. 15 at the end of the third bullet under No. 2 of “Recommendations for Further Study.” Chairperson Blake suggested adding “including but not limited to TCM 15”. Mr. Altshuler suggested adding a fourth bullet under No. 2 to read “impacts of alternative fuel use.” Mr. Kendall suggested adding the phrase “for VOC and NOx” under the first bullet of “Control Measures,” after “control measures” in line one. Dr. Bornstein noted that there are a few typos he would identify for correction to the Deputy Clerk. Chairperson Blake called for a vote on the amended recommendations, and they carried unanimously by acclamation.

- 4. Report of the Public Health Committee Meeting of August 9, 2004.** Ms. Weiner reported that the Committee reviewed the issue of the District’s role in indoor air quality (IAQ) and adopted recommendations urging that multi-agency public meetings on IAQ be held in the Bay Area and that the District sponsor a scholarship for graduate student study of the issues. The Committee reviewed a recent California Air Resources Board (CARB) draft IAQ report as well as minutes of Dr. Jed Waldman’s presentation on IAQ to the Advisory Council on May 12, 2004. Jack Broadbent, Executive Officer/APCO, noted that while the District lacks authority to establish ambient IAQ standards, there is an exchange between indoor and outdoor air that requires further exploration from a regulatory viewpoint. There was brief discussion on the extent to which people may receive their highest exposure to ozone in indoor environments, or whether, due to surface area, indoor concentrations of ozone might ultimately prove to be comparatively low.

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

Jim Hussey  
Marina Mechanical  
San Leandro, California

noted that “unintended pressurization” in buildings due to leaking duct work, failed cabling seals and cavities in walls can impact IAQ through pressure differential between interior and exterior of the building. He presented the November 2002 magazine of the *American Society of Heating, Refrigerating and Air-Conditioning Engineers* featuring several topical articles on IAQ, and offered to share the research and experience of his industry on IAQ with the Advisory Council.

Patrick Pico  
Sheetmetal Workers Local 104  
San Jose, California

stated that his union sponsored courses for 6,000 journeypersons that install, service and maintain HVAC systems. He presented the “Final Report of the National Center for Energy Management and Building Technologies Task 2: Under Floor Air Distribution (UFAD) – Results of Seminars,” dated January 2004 – July 2004, and offered to work further with the Council regarding IAQ.

Mr. Dawid inquired about regulatory authority over indoor air quality in apartment complexes. Dr. Bornstein noted that in some buildings at San Jose State University that house science departments, the effluent from chemistry laboratory hoods returned into the building through the intake vents.

Staff complaints were filed with the Occupational Safety & Health Administration. Mr. Shanahan observed that emergency standby generators are often installed next to air intake systems. The Council members noted that these remarks illustrate the importance of reviewing the IAQ issue and the various types of exchange between indoor and outdoor air. Mr. Kurucz observed that it is unclear how the District should intercede in this field if it is primarily an architectural issue. Chairperson Blake replied that this is why it would be helpful and informative to hold workshops with other agencies and explore the various jurisdictional issues, as the Committee recommends.

Chairperson Blake called for a vote on the recommendation and it carried unanimously by acclamation.

## **OTHER BUSINESS**

### **5. Report of the Executive Officer/APCO. Mr. Broadbent:**

- encouraged the Council members to participate in the community outreach meetings on the District's OCS. The Community Air Risk Evaluation (CARE) program, which the Council has reviewed, will also be presented in these community meetings.
- stated that a rule on wastewater operations at refineries will be presented to the Board on September 15, 2004 in a public hearing.
- reported that today is a Spare the Air day, the fourth of this season and the second day on which free commute will be offered as part of the Spare the Air program. Data from a survey of over 500 people revealed that 9% avoided a trip and 7% curtailed other pollution generating activities due to the Spare the Air program. The free bus service in the Livermore/Amador Valley indicated an 8% increase in ridership. There is a segment of the Bay Area population that, if provided with transportation choices, will take actions to help the environment.

In reply to Council member questions, Mr. Broadbent stated:

- The recently signed state budget entails a 10% rather than 25% reduction in property tax revenues to the District. The District should be able to manage this shortfall with salary savings from unfilled positions and adjustments in operating program allocations. The District will face the same 10% loss in property tax revenues next fiscal year.
- Free transit on Spare the Air days is provided throughout the Bay Area despite the fact that some areas within the region have greater ozone problems than others. The air from Millbrae during the morning commute transports intra-basin to form ozone in the East Bay; therefore, transportation behavior throughout the region is interconnected. This approach features an episodic type of control measure that is tailored toward the summer ozone season with stagnant wind patterns. The cost-effectiveness criteria may differ from other control measures with year-round applications, and its success depends on the cooperation of Bay Area citizens.

### **6. Resolution Concerning Aspects of the California Performance Review (CPR) Commission of Relevance to Air Quality.** Mr. Dawid presented his "Draft Resolution by the Advisory Council of the Bay Area Air Quality Management District to Retain Independence of California Air Resources Board" dated August 19, 2004. The CPR proposes to replace CARB with a department under the Cal-Environmental Protection Agency (Cal-EPA) Department of Environment. Chairperson Blake noted that this resolution, if passed, will be presented to the Board's Legislative Committee.

Mr. Hayes suggested that the memorandum reflect that the position of support for CARB should be from the District's governing board. Chairperson Blake indicated that in the resolution the "Therefore" clause could be changed to reflect "recommends that the Board of Directors..." In discussion, many Council members proffered support for retaining CARB's independence. Messrs. Altshuler and Glueck suggested that the Council instead resolve to support whatever staff position is adopted, rather than adopt a separate resolution on this issue. Mr. Hayes proposed the following language to replace the final paragraph of the text: "And whereas, the Advisory Council resolves that we believe it to be in the best interest of the air districts and all the people in the Bay Area and throughout California that the CARB remain an independent board. Therefore, we recommend that the Board consider adopting a motion of support for the continuation of the CARB as an independent board."

Dr. Bedsworth noted that in some of the small bullet points there are some minor factual matters that required fixing, such as the fact that the Smog Check program is not solely under CARB's jurisdiction but is under the Bureau of Automotive Repair (BAR). Chairperson Blake stated these minor edits/changes can be made without changing the substantive thrust of the recommendation.

Dr. Bornstein stated that he favors the resolution but feels insufficient time has been given to discuss all the issues. He moved that it be tabled; seconded by Mr. Altshuler. The motion failed 6-9 by a show of hands with the following vote:

Ayes: Altshuler, Bramlett, Bornstein, Glueck, Kurucz, Shanahan

Noes: Bailey, Blake, Bedsworth, Brazil, Dawid, Holtzclaw, Torreano, Weiner, Zamora

In reply to a question by Dr. Bornstein, Chairperson Blake clarified that the Board's Legislative Committee is expected to meet on this issue in October; hence, an interest in the Council addressing the issue at today's meeting.

Chairperson Blake called for a vote on the resolution, as amended by Mr. Hayes, and it carried 13-2 by a show of hands:

Ayes: Altshuler, Bailey, Blake, Bornstein, Bedsworth, Brazil, Dawid, Holtzclaw, Kurucz, Shanahan, Torreano, Weiner, Zamora.

Noes: Bramlett, Glueck.

Chairperson Blake called attention to another aspect of the CPR recommendations and presented her draft memorandum of September 8 entitled "Resolution by the Advisory Council to support streamlined permitting that incorporates public participation and protection of the public's health." Noting that she would not call for a Council vote on the text due to time constraints, for the Council's information she said the text states that the Council takes note of the CPR section entitled "RES14 Streamline Permitting to Reduce Petroleum Infrastructure Bottlenecks" and reaffirms the Council's support for an efficient permitting process that incorporates meaningful public participation and public health protection as a principal goal. She added that she would append another clause to read "and recommends engagement by the District in any policy-making activities that may occur based on this section."

Ms. Bailey responded that she opposes RES14 because it would curtail public comment in permitting and sacrifice public health and the environment for less expensive gasoline. Allowing oil



company consultants to give advice to permit reviewers is also problematic. Chairperson Blake suggested the Council wait to receive a report on the discussion of this matter by the Board Legislative Committee before pursuing this further.

- 7. Air & Waste Management Association (A&WMA) Annual Exhibition & Meeting.** Mr. Kurucz noted that a study was introduced concerning the Forest Park area of Portland where organic pollutants were speciated and traced from downtown back to their source. The study was well-done and reasonably priced at \$40,000 over a two-month period. This type of approach might be considered in the Council's approach to the issue of optical fence line monitoring at refineries. Also, the issue of replacing airport construction and diesel equipment was evaluated, along with a study of the impacts of reducing the speed limit for trucks from 65 to 55mph. Mr. Kurucz suggested the papers are worth studying and could provide guidance on Council work plan topics. Mr. Altshuler added that the keynote address was on sustainability, while last year it concerned the sequestration of CO<sub>2</sub>. The scope of focus of A&WMA appears to be expanding.
- 8. Report of Advisory Council Chair.** Chairperson Blake stated that the Executive Committee noted that the Council has completed almost all of its work plan topics adopted for this year and is now beginning to review the long-term issues. The next Committee meetings may contain an item in which Council members may reflect on how to improve offering the Council's expertise to the staff and Board. Staff will be asked for comments on this as well. She inquired of Council members as to their attendance at the upcoming OCS community meetings. The following was indicated:

  - Richmond – September 23: Blake, Brazil
  - Petaluma – September 22: Hanna
  - Richmond – September 9: Blake, Brazil
  - San Jose – September 29: Dawid, Zamora, Kurucz, Torreano
  - Oakland – September 30: Kurucz, Bedsworth, Bailey, Bedsworth, Brazil
  - San Francisco – October 13: Weiner, Bramlett, Holtzclaw, Shanahan, Hayes
  - Livermore – October 14: Altshuler, Glueck
  - Martinez – October 21: Altshuler, Blake, Brazil
- 9. Council Member Comments/Other Business.** Ms. Bailey noted that on October 14, 2004 CARB will sponsor a study session on its air quality/land-use handbook. On September 9, 2004 the National Resources Defense Council will issue a report on cleaning up pollution at port facilities.
- 10. Time and Place of Next Meeting.** 10:00 a.m., Wednesday, November 10, 2004, 939 Ellis Street, San Francisco, CA 94109.
- 11. Adjournment.** The meeting was adjourned at 12:25 p.m.

James N. Corazza  
Deputy Clerk of the Boards

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

March 12, 2003

To: Scott Haggerty, Chairperson, and Members of the Executive Committee  
From: William Hanna, Chairperson, Advisory Council  
Subject: Improvements to Enhanced Inspection and Maintenance Program

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**Topic**

Recommendations the District can make to improve the emission reductions achieved through the Enhanced Inspection and Maintenance Program, and improve the equity of the program to the public.

**Importance/Implications**

Enhanced Inspection and Maintenance is now required in the Bay Area by the California Legislature (AB 2736). Literature and expert testimony indicates that the program as presently implemented around the state does not always achieve all the emission gains expected. Important shortfalls in emissions reductions can be attributed to gross polluters, older vehicles, high mileage vehicles, and repairs that do not last until the next inspection.

**Recommendations**

The Committee unanimously agrees that the recommendations, when formally adopted and supported by completed background information, should be forwarded to the District staff and/or other agencies and groups as the I&M Review Committee (I&MRC), the California Air Resources Board (CARB), the Bureau of Automotive Repair (BAR), as determined by staff to be appropriate.

- (A) Improve vehicle repair quality and objective from 'passing the test' goal to making viable and proper mechanical repairs to sustain compliance to the next testing period. We recommend that the District and BAR review all measures including increasing the funding available to make more robust repairs. This could include separating the repair location from the testing location for funded repairs which should result in further emissions reductions, the goal of the I&M Program.
- (B) The Advisory Council strongly endorses the District's participation in the ARB remote sensing pilot program. Special attention should be paid to the human issue and social equity in program implementation. We advocate that the District initiate a public relations program for the remote sensing program and the Enhanced I&M Program.

- (C) The Advisory Council strongly recommends continuation of the BAR vehicle buy-back program. The BAR, District and other buy-back programs should work together in order to provide incentives for consumers to remove gross polluting vehicles from operation rather than continue to operate them.

In discussion, it was noted that the state and local vehicle buy-back programs significantly differ in the amount of remuneration they provide to owners for scrapped vehicles as well as in program eligibility criteria. These disparities are confusing and pose potential impediments to fuller public participation in the available buy-back programs.

- (D) Evaluate eliminating the two-year (2) waiver policy for vehicles that fail smog check and identify other options for vehicle owners. The BAR should use its financial repair assistance program to eliminate the need for waivers.
- (E) Advocate a vehicle registration fee increase of \$1.00 to \$3.00 per vehicle in order to allow the BAR and the District to increase the number of vehicles eligible to have government financial support for repair and inspection and buy-back program.
- (F) We recommend elimination of the 30-year rolling exemption at 1974. Vehicles manufactured 1974 or earlier would continue to remain exempt. We 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.
- (G) Advocate annual inspection and maintenance of high-use government and private fleet vehicles.

In discussion, the Committee noted that it has included several different approaches in its recommendations to reduce emissions from gross polluting vehicles (GPVs). Modeling runs by the District and MTC would need to be conducted to ascertain what portion of the mobile source emissions inventory comes from certain older vehicle groups and what the overall air quality impact of annual rather than bi-annual testing would be for such vehicular categories.

- (H) Identify time frame for regularly scheduled replacement of oxygen sensor devices, and other emission control system components. These are relatively inexpensive devices that are critical to the emission control system and are often related to a vehicle becoming a GPV.
- (I) The Advisory Council Technical Committee was requested to review the ARB modeling components, and as appropriate, recommend further options for collecting data, reducing the effects of the gross polluting vehicles, evaluate the possible impacts of a program biased toward hydrocarbon emissions, and identify other components of a Hybrid I&M Program that should be included or modified to support the programs goals.

The Technical Committee reviewed the extent to which mobile source emissions modeling could include real-world data and more appropriately address categories of emission reductions applicable to such hydrocarbon-limited areas as the Bay Area.

- i. 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.
- ii. 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.
- iii. 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.

### **Key Issues**

**Recommendation A:** Presentations from BAR representatives David Amlin and Patrick Dorais, NREL representative Doug Lawson and CCEEB's Bob Lucas support comments from BAAQMD staff Tom Perardi and Amir Fanai that one of the major short comings of the I&M Program is the inability of the I&M repair and maintenance component to guarantee the repairs are sufficiently robust to endure to the next biennial test cycle. BAR data indicate that emissions control components of some cars are repaired during one I&M cycle and are in need of repair again at the next I&M cycle. Key components of an emission control system are the O<sub>2</sub> sensor, catalytic converter, and evaporative canister. No data indicate how soon after initial repair the vehicle again needed repair. These vehicles may have been operated from 1 to 23 months out of compliance before the next I&M test identified the problem. This is an area of concern for consumers as well as for air pollution.

Some repair stations and vehicle owners may choose to repair sufficiently to, "pass the test." There is nothing illegal here, however a passing vehicle may fall out of compliance soon after the test.

Take measures to uniformly improve vehicle repairs throughout the region, and target emphasis on areas upwind of Livermore.

**Recommendation B:** Remote sensing is recommended by Doug Lawson of the National Renewable Energy Laboratory (NREL) and is the intent of the Legislature. It was included in SB 629, the 1994 bill establishing the Inspection and Maintenance Program, as a component of the enhanced I&M program criteria.

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.

Testimony was received that the I&M Program cannot identify all vehicles that are operating out of compliance with emission limits. Reasons include mechanical failures that are not detected or

repaired between inspections, and intentional evasion of the test. Remote sensing provides an opportunity to identify gross polluting vehicles in an on-road operating environment. The data gathered can also be used by ARB to modify and update vehicle emissions modeling data.

The District has requested including the Bay Area in a 2003 remote sensing pilot program.

In discussion, it was noted that last year Joel Schwartz of the I&MRC gave a presentation on remote sensing to the Board of Directors, which expressed its support for the remote sensing program and proposed the Bay Area host a pilot program. Also, recent data from a remote sensing program conducted in another state, Arizona, indicates that 55-60% of the vehicle owners contacted via letter responded that they would have their vehicle checked for high emissions. This approach is comparable to, and could complement, the District's Smoking Vehicle program.

BAR representatives David Amlin and Patrick Dorais, NREL representative Doug Lawson, CCEEB representative Bob Lucas as well as BAAQMD staff personnel all stated that all recommendations should be pro-active in the public relations arena. An effective program must educate and inform the public that the components of a hybrid enhanced I&M Program are being implemented to enhance air quality, to reduce emissions, and to protect consumers. This means not only implementing enhanced I&M but also remote sensing and other program enhancements including any consumer protection or assistance with repairs that do not last until the next inspection cycle.

**Recommendation C:** Vehicle buy-back programs, operated by BAR and the District and repair assistance programs help reduce emissions from the vehicle fleet. BAR representatives presented on July 23, 2002, that the BAR "Buy-Back" program was put on hold due to budget constraints.

The District program requires that vehicles be in compliance and operating to be eligible for the \$500.00 buy-back eligibility. The ARB program allows an owner to turn in a non-operating gross polluting vehicle to receive a \$1,000.00 program eligibility check. The District should ensure they are targeting high emitting vehicles with their program.

The programs should work together in order to provide incentives for consumers to remove gross polluting vehicles from operation rather than continue to operate them under a waiver.

**Recommendation D:** The goal and efforts directed towards reducing emissions is partially defeated by BAR policies that allow for the gross polluting vehicles to continue to operate for 2-years under waiver without sufficient repair.

Eliminate waivers for vehicles that are too expensive to fix, as these are the most problematic.

ARB has historically stated that 10% to 15% of the vehicles account for 50% of the mobile source emissions inventory (ARB Statistic). Presentations from BAR representatives David Amlin and Patrick Dorais, NREL representative Doug Lawson and CCEEB's Bob Lucas indicate that identification and repair of gross polluting vehicles are a key to effective implementation of an I&M program. Mr. Lawson's data indicate that as few as 5% of all vehicles contribute up to 83% of the NOx, CO and ROG. However, a different 5% of the fleet is responsible for ROG,

than for NOx or for CO. Different types of mechanical failures lead to increased NOx emissions than lead to increased ROG or CO emissions.

SB 629 (1994) allows for operation under waiver for one-2 year registration period. The owner can get two types of waivers, but must spend the \$450 maximum attempting to repair the car before getting the waiver. The result may be an inadequate repair which does not bring the vehicle into compliance, or does not last very long. After the 2-year waiver, the vehicle must pass the next test without waiver to be registered by DMV.

This two-year period operating with high emissions is counterproductive to the goals of the program. In recognition that repairs costing more than \$450.00 may be beyond the means of some vehicle owners, this committee recommends ensuring that need-based repair assistance programs and vehicle buy back programs are available and that waivers should be eliminated.

The public has largely agreed with the objectives of the program. District and BAR data indicated that of the millions of vehicles operating in the Bay Area, less than 400 vehicle owners requested a waiver from making complete repairs and passing the test.

In discussion, it was noted that this approach avoids the need for legislative change to eliminate waivers per se by instead focusing the repair subsidy program on providing a higher repair subsidy for owners that qualify for a waiver, in effect eliminating the latter.

**Recommendation E:** Based upon the discussion with BAR, Staff personnel, Doug Lawson and CCEEB representatives the main issue preventing previous implementation of many I&M Program improvements is money.

The committee believes that the emissions reduction benefits derived from the implementation of remote sensing, improving the ARB and the District buy back program, increasing the quality and quantity of vehicle repairs and improving and enhancing data collection are all worthwhile program benefits. We recommend that a small, \$1.00 to \$3.00 per vehicle, registration fee increase be considered to fund these programs.

The development of cost-per-ton analysis can be performed by ARB, BAR and District staff to analyze the cost and benefits from the recommended programs and the vehicle registration fee increase.

**Recommendation F:** Staff indicates that 18% of the emissions from the total vehicle fleet are from vehicles 30 years old, or older, which are exempt from smog inspections. Cars through 1974 are presently exempted from inspection. Cars manufactured after 1974 are presently required to receive biannual inspection.

**Recommendation G:** Data presented by NetWorkCar representative Don Brady indicates that taxi fleets, averaging 72,000 miles per year fall out of compliance much quicker than the average fleet and sooner than the 2- year I&M schedule will identify the increased emissions.

Mr. Brady indicated that taxis in the Bay Area may be required to be sold after they are 3 years old. He also stated that the highway patrol sells its high mileage cars. The committee also

recommends that BAR or the I&MRC, or other body look into the compliance status of these cars after sale.

Therefore we strongly recommend that high mileage fleets be subject to more frequent inspection schedules and not be eligible for the 4 or 6 year waivers from test and that they receive an annual test. SB 629 allows fleet operators to have in-house I&M certified programs.

SB 629 states: (g) Notwithstanding any other provision of this section, fleets consisting of vehicles for hire or vehicles which accumulate high mileage, as defined by the department, shall go to a referee station when a smog check certificate of compliance is required. Initially, high mileage vehicles shall be defined as vehicles which accumulate 50,000 miles or more each year. In addition, fleets which do not operate high mileage vehicles may be required to obtain certificates of compliance from the referee if they fail to comply with this chapter.

**Recommendation H:** Replacement of the Oxygen sensor, at a specified age or mileage was a recommendation presented by former APCO Ellen Garvey at the October 31, 2002 committee meeting.

This philosophy however follows the suggestion towards enhancement as presented in the prior presentations by BAR, Staff, Doug Lawson, CCEEB and others as a further enhancement component of the I & M program to assist in emissions reductions policies. Other recommendations were gas cap program, evaporative canister and catalytic converter inspection programs.

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.

**Recommendation I:** One of the critical issues with the ARB guidelines toward the I & M Program is that the model (EMFAC) places a large priority on reductions of NOx as an ozone reduction element.

Based on the findings of Doug Lawson of NREL, SB 529 and the UC Riverside Study it appears that HC reduction is the most effective element to reduce ozone levels in the Bay Area.

The Advisory Council Technical Committee is requested to review the ARB modeling components, and as appropriate, recommend further options for collecting data, reducing the effects of the gross polluting vehicles, evaluate the possible impacts of a remote sensing program biased toward hydrocarbon emissions, and identify other components of a Hybrid I & M Program should be included or modified to support the programs goals.

## **Information Considered**

Members considered reports to the Committee from:

Messrs. David Amlin and Patrick Dorais, of the Bureau of Automotive Repair  
Mr. Doug Lawson, Principal Scientist, National Renewable Energy Laboratory (NREL)  
Mr. Robert Lucas, Lobbyist, California Council for Economic and Environmental Balance (CCEEB)  
Mr. Don Brady, Vice President of Sales, NetWorkCar  
Mr. Thomas Perardi, Planning Division Director, Air District  
Mr. Amir Fanai, Senior Air Quality Engineer, Air District Planning Division

## **Deliberative Process**

The Air Quality Planning Committee was asked to consider this topic by Council Chairperson Sawyer as part of its work starting in February 2002. The Committee met on February 25, April 23, May 28, June 18, July 23, August 20, September 24, October 31, December 9, 2002, January 6, 2003 and February 25, 2003 to receive and discuss presentations on the issues. The Committee unanimously arrived at its recommendation for forwarding to and consideration by the full Advisory Council.

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A chronology of the Committee's deliberations, and the presentations received on this matter, is available upon request.



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

November 3, 2004

To: Chairperson Blake and Members of the Advisory Council

From: James N. Corazza, Deputy Clerk

Re: URL for Additional Recommendations on Vehicle Inspection & Maintenance

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Deputy Air Pollution Control Officer Peter Hess has provided the following URL for additional recommendations on vehicle Inspection & Maintenance:

James,

Please find below a site which contains the 2004 recommendations by BAR and ARB for improving I&M. Please include this document in the package. Thank you.

[http://www.imreview.ca.gov/reports/final\\_draft\\_eval\\_report\\_2004.pdf](http://www.imreview.ca.gov/reports/final_draft_eval_report_2004.pdf)

Peter

The text cannot be downloaded from the website and attached via e-mail. Therefore, the Agenda packets will be mailed to Council members and contain hard copies of the report.

:jc

## AGENDA NO. 4

October 25, 2004

To: Chairperson Blake and Members of the Advisory Council

From: Chairperson Weiner and Members of the Public Health Committee

RE: Recommendation to the Advisory Council

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**Topic:** Should the District recommend that all Bay Area petroleum refineries install a fenceline air monitoring system similar to that at the ConocoPhillips Rodeo refinery, in order to provide real-time information to the public?

**Background:** In 2003, Deputy APCO Peter Hess told the Advisory Council that public comments on the District's 2001 Ozone Plan revealed an interest in knowing more about real-time emissions from petroleum refineries. He asked the Advisory Council to consider whether the District should recommend that all Bay Area petroleum refineries install a fenceline monitoring system, as had been done at the ConocoPhillips Rodeo refinery. That system was installed in 1997 as part of a Good Neighbor Agreement after a major incident at the refinery, then owned by Unocal. The system uses optical remote sensing monitors that report in real time raw data which can be posted on the Internet.

**Information considered by the Council:** The Council heard presentations and reviewed documents concerning monitoring technology; the specific system at ConocoPhillips; comparisons of data from that system with other monitoring and refinery incident data; monitoring conducted by the District and CARB; and community concerns. Presentors included:

- ◆ Alton Arnett and Ted McKelvey, Terra Air Services (operator of the system at the ConocoPhillips refinery)
- ◆ Randall Sawyer, Hazardous Materials Program, Contra Costa County Health Services Department
- ◆ Howard Adams, Shoreline Environmental Alliance, Crockett
- ◆ Jay Gunklemean, Crockett resident
- ◆ Bill Concannon, Crockett resident
- ◆ Julia May, Communities for a Better Environment
- ◆ Robert L. Spellicy, Industrial Monitor and Control Corporation
- ◆ Kevin Buchan, Western States Petroleum Association
- ◆ Phillip Stern, Conoco Phillips
- ◆ Gary Kendall, Technical Division Director, BAAQMD
- ◆ Kelly Wee, Director of Enforcement, BAAQMD
- ◆ Ken Kunaniec, Engineering Manager, BAAQMD
- ◆ Jim Karas, Engineering Manager, BAAQMD.

The Council's Public Health Committee held a public meeting in Rodeo in addition to several meetings on the subject at the District office.

**Council Findings:** The fenceline air monitoring system at ConocoPhillips Rodeo monitors 38 compounds and primarily registers ground level fugitive emissions. Alarm levels based on health effects data obtained from the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) are programmed into the system. Since the Rodeo system was installed, more sophisticated monitoring instruments have come onto the market, some of which is being installed at Rodeo. The District also operates a few ground level monitors near refineries, and refineries operate their own ground level monitors as well as numerous continuous emission monitors in certain stacks.

In advocating for the system at the Rodeo refinery, residents hoped that it would provide useful information directly to the community, the BAAQMD and other agencies for health protection, regulatory, enforcement and emergency response purposes. They said the fenceline monitoring data was reassuring and empowering, especially since it is provided independently of the refinery. They proposed several specific refinements and updates to the system at ConocoPhillips, and urged the District and other agencies to access and use the fenceline monitoring data.

Public access to the monitoring data is limited to a few residents who are advocates of the system. Contra Costa County, working with community members and ConocoPhillips, has created a web site that provides public access to historical information from the monitors. The web site includes real-time meteorology data and toxicology information on relevant substances. In the future, the site will allow access to real-time data.

Since the fenceline monitoring system was installed in 1997, no alarm level has been reached. Little correlation has been found between the monitoring data and the occurrence of an accidental release; emissions from incidents may be too high to reach the monitors. Optical remote sensing monitors such as those at ConocoPhillips are in place in several locations in the United States and elsewhere (one is located in downtown Benicia), but no peer-reviewed accepted protocol exists for review of the data they create in fenceline monitoring.

The public's interest in real-time information about emissions from petroleum refineries reflects genuine concerns about both short-term health effects during incidents and long-term health effects from emissions during normal operation, regardless of regulation. The Council did not find sufficient information to support a recommendation for fenceline monitoring at refineries other than the ConocoPhillips refinery, but did find several other steps that the District can take to make refinery emission data publicly available, some in real time and some shortly after its creation. Such information would be useful to District, state and local officials, as well as the general public.

**Recommendations:** The District can improve the public's access to real-time and recent refinery emissions data in the following ways:

- 1) The source-oriented monitors that the District operates near refineries to monitor for H<sub>2</sub>S and SO<sub>2</sub> are equipped to allow the data to be posted within about an hour on the District's web site, like the data posted from the ambient air monitoring network. The Council applauds this activity and looks forward to seeing this information on the District's web site.
- 2) Consider adding to each of the District's ground level monitors (GLMs) a hydrocarbon analyzer and a continuous particulate matter monitor, which would increase the number of substances monitored. An automatic sampler could be added and programmed to activate sampling based on specified levels detected by the monitors; such samples could be analyzed to speciate compounds released during an event. The sampler could also allow for manual sampling.
- 3) Evaluate the number and location of District GLM sites near refineries and consider whether to move or add monitors based on all-season wind patterns and population changes.
- 4) Refineries operate GLMs. The District should consider requiring installation of any or all of the equipment noted in 1), 2) and 3) above at permit renewal, under compliance settlements, or in developing Supplemental Environmental Projects (SEP). We appreciate the District's recent efforts in this regard.
- 5) Refineries operate approximately 300 continuous emission monitor (CEM) analyzers, which are programmed with alarm levels and provide information from inside stacks as emissions are occurring to assist in quick identification and control of improper operation. Refineries provide the District with CEM data on the 10<sup>th</sup> of each month for the previous month's data. These reports could be requested in electronic form, standardized and posted on the District's web site with general explanatory information, graphical presentations and other methods and material to make them more readily useful to the public.
- 6) The District should consider evaluating the refinery CEM locations to determine whether additional CEMs should be installed.
- 7) The District's new CARE program should exercise its potential to identify other sources of real-time information from refineries and other facilities or locales.