

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

ADVISORY COUNCIL REGULAR MEETING
10:00 a.m., Wednesday, March 12, 2003 – Board Room

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 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.

3. Approval of Minutes of January 8, 2003

4. Reports of Standing Committees

(A) Public Health Committee Meetings of February 10 and March 10, 2003 – Brian Zamora

Report on the staff presentation given on the adoption of the model woodsmoke ordinance at the local level and also on two guest speaker presentations regarding fenceline emissions monitoring at refineries and chemical plants.

(B) Technical Committee Meeting of February 4, 2003 - Robert Harley, Ph.D.

Report on the Committee's recommendations on the following items:

1. *Intermittent Ozone Control Strategies. Suggestions will be presented on intermittent ozone control strategies.*
2. *Regional Greenhouse Gas Emission Inventory. Report on the Sonoma County Climate Protection Campaign proposal that the District allocate \$25,000 to their Campaign.*
3. *Particulate Matter Abatement. Presentation of comments on ten recommendations on how the District can further abate particulate matter, listed in the Public Health Committee's December 10, 2002 report entitled "Particulate Matter Abatement".*
4. *Vehicle Inspection & Maintenance. Presentation of the Committee's comments on the Air Quality Planning Committee's recommendations listed in "Improvements to Enhanced Inspection and Maintenance Program," dated February 25, 2003.*

(C) Air Quality Planning Committee Meeting of February 25, 2003 - Kraig Kurucz

Report on the Committee's recommendations on the following items:

1. *Intermittent Ozone Control Strategies. Suggestions will be presented on intermittent ozone control strategies.*
2. *Regional Greenhouse Gas Emission Inventory. Report on the Sonoma County Climate Protection Campaign proposal that the District allocate \$25,000 to their Campaign.*
3. *Improvements to the Enhanced Vehicle Inspection and Maintenance program. Report on the Committee's recommendations of February 25, 2003 that are aimed at improving the emission reductions achieved through the program.*

(D) ACTION ITEMS:

After taking into account the recommendations and comments of the Standing Committees, the Advisory Council will vote to endorse or reject the following items:

1. *The Sonoma County Climate Protection Campaign proposal that the District allocate \$25,000 to support the Campaign.*
2. *Lists of Suggested Intermittent Ozone Control Measures proposed by the Technical and Air Quality Planning Committees at their February meetings.*
3. *Advisory Council Public Health Committee recommendations entitled "Particulate Matter Abatement," dated January 8, 2003.*
4. *Air Quality Planning Committee recommendations entitled "Improvements to Enhanced Inspection and Maintenance Program," dated February 25, 2003.*

(E) Executive Committee Meeting of March 12, 2003 - William Hanna

5. The 2004 Ozone Plan

(A) Status Report on Modeling

District staff and the consultant, ENVIRON International Corporation, will provide a status report on the photochemical modeling for the 2004 ozone plan.

(B) Update on Development of the Plan

District staff will provide a status report on the development of the 2004 Ozone Plan.

6. **Report of Executive Officer/APCO** - *William C. Norton*
7. **Report of Advisory Council Chairperson** - *William Hanna*
8. **Council Members Comments/Other Business**

Any member of the Council, or its staff, on his or her own initiative, or in response to question 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 an issue on a future agenda.

9. Time and Place of Next Meeting

10:00 a.m., Wednesday, May 14, 2003, 939 Ellis Street, San Francisco, California 94109.

10. Adjournment

BH: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
M A R C H 2 0 0 3

TYPE OF MEETING	DAY	DATE	TIME	ROOM
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	Thursday	13	9:30 a.m.	4th Floor Conf. Room
Board of Directors Regular Meeting	Wednesday	19	9:45 a.m.	Board Room
Board of Directors Stationary Source Committee	Wednesday	19	11:00 a.m.	Room 716
Advisory Council Air Quality Planning Committee	Tuesday	25	9:30 a.m.	Room 716
Board of Directors Budget & Finance Committee	Wednesday	26	9:30 a.m.	4th Floor Conf. Room

MR:mr
3/4/03 (4:30 p.m.)
P/Library/Calendar/Moncal

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
A P R I L 2 0 0 3

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Advisory Council Technical Committee	Tuesday	1	9:30 a.m.	Board Room
Board of Directors Regular Meeting	Wednesday	2	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee	Thursday	10	9:30 a.m.	4th Floor Conf. Room
Board of Directors Public Outreach Committee	Monday	14	10:00 a.m.	4th Floor Conference Room
Advisory Council Public Health Committee	Monday	14	1:30 p.m.	Room 716
Board of Directors Regular Meeting	Wednesday	16	9:45 a.m.	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 Budget & Finance Committee	Wednesday	23	9:30 a.m.	4th Floor Conference Room
Board of Directors Executive Committee	Wednesday	30	9:30 a.m.	4th Floor Conference Room

MR:MR
3/5/03 (9:07 A.M.)
P/Library/Calendar/Moncal

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

DRAFT MINUTES

Advisory Council Regular Meeting and Retreat
and
Meeting of the Public Health Committee
Meeting of the Air Quality Planning Committee
Meeting of the Technical Committee
10:00 a.m., Wednesday, January 8, 2003

1. **Call to Order – Roll Call.** 10:15 a.m. Quorum Present: William Hanna, Chairperson, Sam Altshuler, P.E., Elinor Blake, Harold M. Brazil, Irvin Dawid, Ignatius Ding, Fred Glueck, Rob Harley, Ph.D., Stan Hayes, John Holtzclaw, Ph.D., Jane Kelly, Kraig Kurucz, William A. Nack, Robert F. Sawyer, Ph.D., P.E., Kevin Shanahan, Linda Weiner, Brian Zamora. Absent: Patrick Congdon, Norman A. Lopera, Jr., Jill Stoner.
2. **Public Comment Period.** There were no public comments.
3. **Recognition of Outgoing Council and Committee Chairs.** Chairperson Hanna acknowledged the years of service on the Council of four previous Council members Jane Seleznow, Terry Trumbull, Chuck Harvey and Karen Licavoli. On behalf of the Council, he expressed his appreciation to outgoing Standing Committee Chairs Fred Glueck and Sam Altshuler, P.E., and to outgoing Council Chair Robert F. Sawyer, Ph.D., P.E., for their outstanding leadership during 2002.
4. **Approval of Minutes of November 13, 2002.** Mr. Altshuler requested that, in the first sentence of paragraph one on page three, “particle count numbers” replace “PM levels” and that the next sentence end at “less NOx.” The sentence that follows should read “NO2 levels from CNG are not affected by the addition of an oxidation catalyst and are therefore considerably less than a CRT-equipped diesel.” Dr. Sawyer requested that at the top of page two, the reference to NOx be deleted and “about” be inserted before “83%”. Mr. Altshuler moved adoption of the minutes as corrected; seconded by Mr. Glueck; carried; with Messrs. Hayes, Nack and Dawid abstaining.
5. **Staff Presentations:**
 - A. **Greenhouse Gas Emissions Inventory.** Mike Sandler and Ann Hancock of the Sonoma County Climate Protection Campaign (SCCPC) stated that 137 cities and local jurisdictions in the United States have adopted resolutions endorsing climate protection. Increasing regulation of greenhouse gas emissions is likely, given the multi-nation ratification of the Kyoto Protocol and California’s adoption of AB 1439 addressing greenhouse gas emissions from transportation. Sonoma County and its nine cities are developing a greenhouse gas emissions inventory from government operations and will set targets for reducing the emissions, create an action plan for achieving those targets, implement the plan and monitor its progress. Sonoma County and Santa Rosa have each completed their emission inventories, and within the next six months the remaining eight cities are expected to complete theirs. The Sonoma County Waste Management Agency (SCWMA) provides administration for the project because all the cities and the county are represented on it. To support the program, Sonoma County has contributed \$25,000 and

Santa Rosa has provided \$10,000. The other eight cities are each expected to contribute \$4,000.

The SCCPC believes that District technical expertise, public outreach and relations programs and its regional focus combine to create an ideal context for the coordination of regional climate protection efforts. It is therefore seeking \$25,000 from the District as well as its participation in the project. The District in turn will obtain data on how climate protection plans interface with attainment plans. Scientific data indicates that while criteria pollutants have been reduced over the years CO₂ levels continue to increase. Some of the funding from the District will also be used to leverage other funding for this project in Sonoma County. At the end of nine months, the SCCPC will provide a written report on these issues as well as make a presentation to the Board of Directors, and if requested, to the Advisory Council as well.

In discussion, Council members made the following suggestions to the SCCPC representatives:

- Re-approach the Northern Sonoma County Air Quality Management District for additional funds for this project. That District lead California in woodsmoke abatement, and much of the Bay Area's woodsmoke abatement action followed its initiative. (Altshuler)
- Precisely delineate the scope of emission inventory work conducted by the California Climate Action Registry and the SCCPC and consider how to coordinate their efforts. (Hayes)
- Set aside part of the \$25,000 to evaluate the methodology used to collect the data and to replicate it in other local jurisdictions. This goes beyond the SCCPC efforts to get the resolution passed elsewhere, and of ICLEI to replicate methodology for data gathering, and includes replicating and tracking the SCCPC program in other local jurisdictions. (Weiner).
- Precisely identify in what other ways the District may participate, such as in providing technical assistance in evaluating the link between the pollutants it regulates and greenhouse gas emissions, and in coordinating with outreach programs in other jurisdictions. (Blake)
- More clearly link the climate protection purpose of the SCCPC with the District's mission to protect public health through attainment of ambient air quality standards. Consider areas of SCCPC program linkage with new state regulation of fuel economy. Address impacts of warmer temperature on air quality from increased gasoline evaporation from vehicles, increased vapor emissions from stationary sources and increased electricity demand. Such linkages would more clearly place the SCCPC within the District's purview. (Harley)

Ms. Kelly opined that District involvement in the field of greenhouse gas emissions is appropriate since it is likely to receive regulatory responsibility for climate protection. Dr. Sawyer added that District staff support should also be provided to assist in ascertaining the nexus between greenhouse gas emissions and ozone photochemistry. Mr. Dawid observed that given the link between air quality and climate change, clean diesel might compare favorably with CNG. Mr. Altshuler replied it is important to consider the role of elemental carbon in effecting global climate change and added that there is considerable debate on the preferred fuel for buses (diesel, CNG, biodiesel, LNG) all of which have implications for emissions of CO₂.

Mr. Norton stated the Board would like to receive by the Council's next Regular Meeting its recommendation on whether the District should support this program. Mr. Kurucz stated the Council should first know more about the status of the District's budget in light of the state budget crisis before adopting a position. Chairperson Hanna responded that the Advisory Council's role is to advise the Board as to the worthiness of this proposed project. The Board of Directors and the District staff are best positioned to evaluate its fiscal impacts.

Ms. Blake moved that the Council go on record as indicating it has heard the report and will consider it further, and recommends that the Board of Directors formalize its support for the project through a letter that could be used in fund raising or other SCCPC activities; seconded by Dr. Holtzclaw. The motion FAILED on roll call:

AYES: Blake, Brazil, Ding, Holtzclaw, Kelly, Sawyer, Weiner, Zamora.

NOES: Altshuler, Dawid, Glueck, Hanna, Harley, Hayes, Kurucz, Nack, Shanahan.

Mr. Hayes moved that the Council indicate it has heard the report of the SCCPC and supports in concept the regional approach this proposal represents to greenhouse gas management; that it plans to take it under further consideration and refer it to the Air Quality Planning and Technical Committees; and that it will adopt recommendations at its next Regular Meeting on March 12, 2003; seconded by Dr. Holtzclaw; carried unanimously by acclamation.

B. 2004 Ozone Attainment Plan. Tom Perardi, Planning Division Director, stated that the federal and state law requires that attainment plans be submitted to meet specific air quality standards by a prescribed deadline. The 2004 Ozone Attainment Plan derives from commitments made by the District in the 2001 Plan for a mid-course review. The latter was the region's strategy for attaining the national one-hour ozone standard by 2006 and projected reductions in ozone precursor emissions of 245 tons per day between the base year 2000 and the attainment year 2006. The Attainment Assessment of the 2001 Plan was extensively discussed regarding uncertainties in the emissions reduction target. The mid-course review will use air quality data and analyses from 2003-04 to evaluate the adequacy of the 2001 Plan. The data gathering from routine and intensive studies, its quality assurance, delivery and formatting for use in modeling three different historic episodes, are nearly complete. ENVIRON Corporation has conducted preliminary meteorological and photochemical modeling runs for use in developing emission reduction targets and attainment demonstrations, and these are scheduled for completion by mid-2003. The first community meeting on the Plan is scheduled for this March. New control measures and programs will be considered, followed by environmental review. The final plan will be submitted to the Board in March 2004, to the California Air Resources Board (CARB) in April of 2004 and thereafter to the Environmental Protection Agency (EPA). Dr. Holtzclaw urged that the Plan contain data on attainment projections contained in previous Plans for criteria pollutants and their sources to ascertain if initial projections squared with the results.

6. Reports of Standing Committees:

A. Public Health Committee Meeting of December 9, 2002. Mr. Zamora reviewed the memorandum entitled "Particulate Matter" (PM), dated December 10, 2002, which presents recommendations on improving PM abatement within the District. He noted that their review by the Technical Committee, particularly the item on diesel PM traps, is desirable. In reply to Council member questions, Ms. Blake stated the following:

- Diesel locomotive idling and heavy-duty diesel truck idling were not addressed. Transit and school buses have been the primary focus over the years and the latter were addressed in a recent CARB rule. The recommendations could be updated to reflect CARB's action.
- Based on data provided to the Committee by District Statistician Dr. David Fairley, woodsmoke PM is a significant PM source year-round throughout the Bay Area.
- The District should re-examine its current policy on the use of PM emission offset credits.

- The basis for recommending the mapping of PM on a temporal resolution of less than 24-hours is aimed at better understanding PM source apportionment.

Mr. Altshuler stated discussion at the Technical Committee level would prove helpful as PM chemistry and size are important relative to toxicity, and diesel PM is more toxic than woodsmoke PM. Back-up generators (BUGs) are additional PM sources of concern. Mr. Shanahan and Ms. Weiner recommended the Committee review a document on BUGs prepared by the Environmental Defense Fund (EDF) and receive a presentation from EDF member Nancy Ryan. The Council reached consensus that the recommendations be referred to the Technical Committee. Dr. Harley indicated the Committee would review them in February.

- B. Air Quality Planning Committee (AQPC) Meetings of December 9, 2002 and January 6, 2003.** Mr. Kurucz stated that on December 9, 2002 the Committee unanimously endorsed the District staff's proposed policy changes to the Transportation Fund for Clean Air (TFCA) regarding heavy-duty diesel engines in proposed new Policy No. 27. It also received a presentation from Don Brady from Networkcar on a remote emissions monitoring program for high-use vehicles such as taxicabs and paratransit vehicles in the South Coast AQMD. On January 6, 2003 the Committee unanimously recommended establishing such a program within the District. It also adopted eight preliminary recommendations on vehicle Inspection & Maintenance (I&M) that emphasize the need to deal with gross polluting vehicles (GPVs). The Committee is developing background data to establish a basis for its recommendations.

In discussion, Ms. Weiner observed that the quotation from *The Wall Street Journal* attributed by staff to CARB Chair Dr. Alan Lloyd in support of clean diesel is not entirely in context. She opined that the proposed policy change could undermine the momentum for alternative fuel vehicle programs supported by the TFCA. The American Lung Association (ALA) has written to the District and acknowledges that while retrofitting older vehicles is desirable, a more thorough assessment of the issues is needed. The ALA recommends that 80% all TFCA funds be allocated to offset purchase costs of alternative fuel vehicles and a maximum of 20% for diesel change-outs and retrofits.

- C. Technical Committee Meeting of December 3, 2002.** Mr. Altshuler stated the Committee discussed biogenic emissions from a eucalyptus grove west of Livermore. It received presentations from Klaus Scott of CARB and Jim Wilkinson of Alpine Geophysics on biogenic emissions, their sources, modeling and quantification. Both speakers estimated two tons per day of isoprene would be emitted from the grove, although the margin of error is an order of magnitude. The Committee is evaluating the use of observation-based measurements to discern any markers of isoprene in the monitoring station data near Livermore.

The Committee was brief by staff on the proposed policy changes to the Transportation Fund for Clean Air (TFCA) and after lengthy discussion unanimously support the staff position. Mr. Altshuler opined that the committee did not have the benefit of knowing what other interested parties have said about the proposal and he expressed concern that the Public Health Committee has not reviewed the proposal. He added that the proposed changes could adversely impact TFCA funding for alternative fuel vehicles and that a cap on diesel re-powering funding in the proposed new policy would therefore be appropriate. He also stated that the minutes from the Technical Committee meeting of December 3, 2002 should also have been included in the material that is forwarded to the Board Mobile Source Committee on January 9, 2003. The applicable section of those minutes should be presented to the Mobile Source Committee tomorrow.

Mr. Dawid stated he was impressed with the emission reduction potential of the proposed policy change. He expressed his support for the clean diesel program as well as concern over advocating alternative fuel in existing industry. Mr. Shanahan expressed concern over the notion of a cap on diesel re-powering, noting that the goal of the TFCA is to reduce vehicle emissions in the most cost-effective way possible. The economics of the TFCA projects ought not to be artificially manipulated. For the cost of replacing two diesel-powered refuse trucks with alternative fuel motive power, an entire fleet of older diesel engines could be retrofitted with PM traps. The approach to the TFCA program must be emission-reduction driven. Mr. Altshuler replied that “while emission reductions may be achieved in the early part of the program, the older engines would be run longer and less likely to be replaced in 2007 with a cleaner engine. The long-term impact of the proposed policy change requires further study.”

Chairperson Hanna stated that as there is no specific recommendation from either Committee that this endorsement go before the Board, the Committees should therefore examine this matter further during the working lunch and report out to the full Council when it reconvenes.

D. Executive Committee Meeting of January 8, 2003. Chairperson Hanna stated that the Committee discussed several referrals from District staff and the Board. The 2004 Ozone Plan has been assigned to the Technical Committee and intermittent control measures to the Technical and AQPC. The Technical Committee will review CNG and liquid natural gas (LNG) as engine fuels displacing diesel in internal combustion engines. The Public Health and Technical Committees will review fence line monitoring at refineries. The Public Health Committee will review marine shipping and loading as a source of emissions, as well as the District’s role in a catastrophic event. The proposal for a regional greenhouse gas emission inventory has been discussed and referred to the AQPC and Technical Committee.

With regard to Council issues continued from 2002, the Public Health Committee recommendations on PM abatement, and the AQPC recommendations on vehicle I&M have been referred to the Technical Committee. The Technical Committee will evaluate the role of biogenic emissions in ozone formation near Livermore, the air quality impact of the September 11, 2001 airport shutdown and the Port of Oakland shutdown in late September and early October 2002. The Committee Chairs will choose among the Further Study and Stationary Source Control Measures presented by staff in a “Rule Development Action List for 2003.” The proposed policy change to the TFCA was referred back to the Committees today.

7. **Working Lunch for Meetings and Discussion Sessions of the Public Health Committee, Air Quality Planning Committee and Technical Committee.** The Council broke into Standing Committees at 12:20 p.m. Chairperson Hanna directed the Committees to give priority to their assigned topics and bring up additional topics from the members where desirable. A District staff member will be present at each of the Standing Committee meetings to provide information on the District’s priorities.
8. **Reconvene to Full Council Format for Follow-up on Committee Discussion Sessions.** The Council reconvened at 1:15 p.m. Chairperson Hanna welcomed new members Irvin Dawid and John Holtzclaw, Ph.D (Conservation Organization) and Linda Weiner (Public Health Agency).

Mr. Kurucz stated the AQPC will review I&M, the regional greenhouse gas emission inventory, intermittent ozone control strategies with parking cash-out as an adjunct subject, and will assign a member to attend Council Committee meetings at which fence line monitoring is discussed.

Mr. Zamora stated the Public Health Committee would meet on February 10, April 14, June 9, August 11, October 20 and December 8. Its first priorities are PM abatement, marine shipping as a source of potential emission reductions, and the TFCA policy change. Other topics in order of priority include review of fence line monitoring, the role of the District in a Bay Area catastrophe, Toxic Compound New Source Review (Regulation 2) and Yeast Manufacturing (New Rule).

Dr. Harley stated the Technical Committee will meet on February 4 and will focus on intermittent control measures and how they relate to Spare the Air days in the summer. A staff presentation on current intermittent controls is requested. It will also address the referrals from the other Standing Committees. Later in the year, the Committee will resume evaluation of biogenic emissions near Livermore. The Committee will also take up the monitoring and control of refinery flares. The yearlong mission of the Committee will be the District's ozone attainment planning efforts.

Chairperson Hanna called for further comments on the TFCA issue discussed earlier. TFCA Supervisor Liz Berdugo reviewed the grant structure of the TFCA and the proposed new policy regarding heavy-duty diesel engines. She noted that questions have been raised as to whether this policy will lead to the diverting of funds from alternate fuel vehicle programs. The District will continue to support these programs and views the policy change as a complement to rather than a replacement of alternate fuel programs. The new policy is another means through which to further reduce mobile source emissions. It is unlikely that re-powering applications will flood the TFCA funding pool as at the present time no diesel engine meets CARB's stringent 2004 optional reduced emission standard. In reply to Ms. Weiner's comments on the longevity of PM filters and the need to review topical studies, Ms. Berdugo noted that the record of discussion of the CARB rule on PM filters contains information on this issue. Chairperson Hanna stated that as there is no specific recommendation from the Committees endorsing the proposed new policy for forwarding to the Board, and as there still exists some controversy within the Council as to various aspects of the policy, it will suffice for the minutes of this meeting to reflect the Council members' statements.

9. **Council Members Comments/Other Business.** Ms. Blake commended District staff for its work on the "Don't Light Tonight" program in recent weeks. Ms. Lee responded that the first winter advisory in many years was issued on December 7, 2002. The PM standard was exceeded on that day, and excellent press coverage was received. Mr. Ding noted that the federal government is holding to a firm position on off-road diesel emissions. Chairperson Hanna noted that the Council does review off-road emissions, although CARB has regulatory jurisdiction over them.
10. **Time and Place of Next Meeting.** 10:00 a.m., Wednesday, March 12, 2003, 939 Ellis Street, San Francisco, California 94109.
11. **Tour of District Divisions & Facility.** District staff conducted a tour of the District divisions and building facility for interested Council members, starting at 1:47 p.m.
12. **Adjournment.** 3:02 p.m.

Respectfully submitted by

James N. Corazza
Deputy Clerk of the Boards

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

DRAFT MINUTES

Advisory Council Public Health Committee Meeting
1:30 p.m., Monday, February 10, 2003

1. **Call to Order – Roll Call. 1:30 p.m. Quorum Present:** Brian Zamora, Chairperson, Elinor Blake, Ignatius Ding, Linda Weiner. Absent: Jane Kelly.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of December 9, 2002.** Ms. Blake requested that in the last sentence of the next to last paragraph on page three, “Group” be replaced with “Coalition and other organizations.” She moved adoption of the minutes as amended; seconded by Mr. Ding; carried unanimously.
4. **Update on Model Woodsmoke Ordinance.** Luna Salaver, Public Information Officer, stated that the ordinance will be heard by the City of Sebastopol on February 25 and presented to the Contra Costa Council of Mayors in April. The Santa Clara County Board of Supervisors will hold a hearing on the ordinance at a future date. Eleven of the 15 cities in that county have adopted the ordinance. The City of Campbell has included the ordinance in its General Plan and will hold a public hearing on it in the near future. The District has contacted the Mayors of the Cities of Oakland and El Cerrito, and is working with several District Board members, regarding the adoption of the ordinance in their jurisdictions.

To date, 73 cities in the Bay Area have not adopted the ordinance, and the District is preparing wood burning information packets for them. During their next meetings the Spare the Air Resource Teams will discuss ways to advocate the ordinance. The Committee urged the District to coordinate with the Sonoma County Planning Department and the American Lung Association in promoting the ordinance before the City of Sebastopol. Ms. Salaver indicated she would contact American Lung Association staff in the North Bay as well as Board member Pamela Torliatt who has been active in advocating the ordinance before many cities in Sonoma County.

5. **Understanding Optical Remote Sensing and How It Relates To Fence Line Monitoring.** Alton Arnett, Business Manager of TerraAir Services in Houston, Texas, stated that optical remote sensing (ORS) technology is currently being used to monitor ambient air at the fencelines of refineries and chemical plants. Emitting separate beams of infrared (IR) and ultraviolet (UV) light, ORS detects toxic compounds in the atmosphere and distinguishes them by how they absorb light radiation. The compounds measured can be quantified and speciated in real-time. TerraAir Services operates and provides service to the ORS systems at the ConocoPhillips refinery in Rodeo, California and the Westlake Petrochemical facility in Lake Charles, Louisiana. It also processes the data they generate. The ConocoPhillips system contains 16 separate pieces of equipment monitoring 38 compounds at the 930 meter north fence and the 855 meter south fence. It was installed in 1996 as a result of a Catacarb release in 1994 and cost approximately \$2 million.

Mr. Arnett displayed slides of ORS equipment in monitoring shelters, as well as the system's computer screen that includes data for the compounds monitored, a map of the facility and the surrounding area and meteorological conditions. Compound detection levels are identified by color-coding with green, yellow and red lights. If there is a red flash for 60 seconds, a high level alarm flashes on the screen. If the system operator does not acknowledge the computer alarm after another 60 seconds, a refinery alarm sounds. This has occurred once in the last seven years.

Dial-in access to the screen is permitted to four community members and the staff of the Air District. Ms. Blake added Contra Costa County also has access to this data in real-time. The screen display will soon be posted on the County's website, although the specific features are not yet determined. Of the meteorological indicators, the windrose are of greatest interest to the community for sampling purposes. There was brief discussion of whether the screen display is user-friendly to the layman and if a primer would help to introduce the screen features.

Mr. Arnett added that fenceline monitoring provides for "turf protection" in cases in which a release occurs in one of several adjacent facilities. ORS provides for early detection of a release that can lead to the prevention of a subsequently catastrophic release. It has been utilized to activate a water cannon system around an industrial facility. It has also increased employee safety by identifying compounds at the fenceline of a Houston plant that lead facility staff to discover previously undetected in-house equipment malfunctions.

In response to Committee member questions, Mr. Arnett provided the following comments:

- a) the ability of ORS equipment to operate under diverse or adverse atmospheric conditions, such as subjugation to prolonged, heavy rains or a thick dust cloud, depends upon the density of the water or particulate matter that would block the projected beams of light. This has happened once in heavy precipitation and only for a few minutes. While there is no back-up to the optical equipment, the system has electrical back-up power.
- b) ORS technology is being applied to ambient air monitoring in a field at a considerable distance from a large chemical complex in Seabrook, Texas and also to monitoring for ozone precursors in downtown air in one municipality in the State of Maine.
- c) a portion of the scientific community still regards UV readings with some skepticism due to problems associated with developing a commonly accepted UV data baseline.
- d) a TerraAir Services Project Manager visits the ConocoPhillips refinery every two months to perform general maintenance on the optics, fiber optic cables and the meteorological stations.
- e) TerraAir Services turns over its data to community groups but does not follow their use of it.
- f) the number of contaminants that can be speciated depends on the type of monitor that is used.
- g) the use of ORS in evaluating the composition refinery flare emissions or as an opacity evaluation tool is difficult because the flares are very high. Peter Hess, Deputy Air Pollution Control Officer, stated that portable Lidars could be calibrated to evaluate specific compounds in refinery flares. Mr. Arnett added that ORS applies primarily to ground level, fugitive emissions from pump seals, valves, flanges and floating roof tanks. Measurements of flare emissions at ground level would have to be conducted several miles downwind of the flares.
- h) data are inputted every five minutes from the system and are downloaded at the end of a monitoring period over the telephone line. Three weeks are usually required to process such data, and a total of 28 days is allowed to complete quality assurance.

- i) cost estimates for the ORS system vary, but the Westlake facility in Lake Charles, Louisiana allocated \$400,000 for equipment, monitoring shelters and training. TerraAir Services charges an annual fee of \$350,000 to operate the system.
- j) in the event of a loss of power or a high-level alarm, the system initiates an autopause that notifies all clients via e-mail. With regard to round-the-clock notification, this is largely dependent on the refinery staff that have pager numbers of health department staff.
- k) since the system was installed at the ConocoPhillips refinery in 1996 there have been no exceedances of the safety levels that have been set by the ORS system.
- l) the ORS system has detected emissions on the refinery's south end that did not originate in the refinery.
- m) the infrared beam projected at the fenceline leaves the scope at 10 inches in diameter and measures three feet in diameter at a distance of 1,000 feet.
- n) the following websites provide additional information concerning ORS technology: Boreal Laser at www.boreal-laser.com, IMACC at www.imacc.com and Opsis at www.opsis.se.

Mr. Hess stated that the issue before the Committee is whether ORS technology should be recommended for fenceline emissions monitoring at the other four Bay Area refineries. This technology enables the community to know more about emissions crossing the fenceline in real-time. By contrast, static canister samples are a technology of the 1960's. They measure only a few compounds and cannot be located in every community. The processing and analysis of samples from fixed monitors is also two months behind their collection. Ms. Blake observed that the real-time fenceline monitoring data takes a month to quality assure. She added that the District does not post data from its fixed monitors on its website, although such information would be useful over time to provide a picture of emissions. Mr. Hess replied that the District plans to post its fixed monitor data on its website when it is upgraded, although it will not be in speciated real-time.

- 6. Committee Member Comments/Other Business.** The Committee briefly reviewed the comments of the Technical Committee on draft particulate matter abatement recommendations.
- 7. Time and Place of Next Meeting.** Monday, March 10, 2003, 1:30 p.m., 939 Ellis Street, San Francisco, California 94109.
- 8. Adjournment.** 2:40 p.m.

Respectfully submitted by:

James N. Corazza
Deputy Clerk of the Boards

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

DRAFT MINUTES

Advisory Council Technical Committee Meeting
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. Lapera 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

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

DRAFT MINUTES

Advisory Council Air Quality Planning Committee Meeting
9:30 a.m., Tuesday, February 25, 2003

1. **Call to Order – Roll Call.** 9:39 a.m. Quorum Present: Kraig Kurucz, Chairperson, Harold Brazil, Irvin Dawid, John Holtzclaw, Ph.D., Kevin Shanahan. Absent: Patrick Congdon, Fred Glueck, William A. Nack.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of January 6, 2003.** Dr. Holtzclaw moved approval of the minutes; seconded by Mr. Dawid; carried unanimously.
4. **Greenhouse Gas Emission Inventory.** Tom Addison, Legislative Analyst, stated that through the International Council for Local Environmental Initiatives (ICLEI), Sonoma County and its nine cities have established a program to inventory, quantify and establish a target for reducing greenhouse gas (GHG) emissions from municipal activities. The Sonoma County Climate Protection Campaign (Campaign) has approached the Board of Directors asking for \$25,000 in support. The Campaign would help define how the District could work to support climate protection and also educate the consultant about the District’s work. District staff was surprised that the Campaign’s efforts were not being made in conjunction with the California Climate Action Registry (Registry) that has functioned for three years and provides tools to local jurisdictions and businesses for quantifying their GHG footprint. A number of other cities in the Bay Area have joined the Registry and are using the software that it provides for calculating GGE emissions.

The following points were offered and discussed by the Committee members:

- a) The Campaign was not aware of, is not coordinated with, and duplicates the Registry.
- b) The Campaign is already supported with \$67,000: \$25,000 from Sonoma County, \$10,000 from the City of Santa Rosa, and \$4,000 from each of the eight other cities. This must be taken into account given the fiscal constraints imposed on the District by the state budget crisis, which will result in a significant loss of subvention funds and possibly property tax revenues.
- c) It is unclear how the \$25,000 from the District would be used by the Campaign. Staff has noted that the inventory work will be completed with the funds already received. The consultant intends to use some of the District’s funds to leverage other funding and provide the District with advice on how to work regionally to reduce GHG emissions. The latter is a staff function.
- d) Financial support for this program on an individual county basis sets a precedent for the District for similar requests from other counties. Coordination of GHG emission inventory work through the Registry avoids this complication and is also preferable in times of fiscal constraint.

- e) Staff has noted that Sonoma County has received \$4 million from the Transportation Fund for Clean Air (TFCA), much of which contributes toward the reduction of GHG emissions.
- f) The Campaign could publicize what it has already achieved, and the Air District could provide staff support that will help to quantify emissions and assess program cost-effectiveness.

Chairperson Kurucz stated he would entertain a motion to recommend that (a) District staff work with the Campaign to identify TFCA projects containing funding that could be used as seed money to leverage further contributions to the Campaign; (b) the Campaign should coordinate with the Registry and thereby improve its efficiency; and (c) the District not allocate the requested \$25,000 but instead provide staff assistance. So moved by Dr. Holtzclaw; seconded by Mr. Shanahan.

Noting that duplication of the Registry is not *per se* a reason to reject the request, Mr. Dawid offered a substitute motion that the District approve \$4,000 to match the grant from the smaller cities and also provide staff assistance; seconded by Mr. Brazil. By a show of hands, the substitute motion FAILED:

AYES: Dawid
NOES: Brazil, Holtzclaw, Kurucz, Shanahan

By a show of hands, the original motion PASSED:

AYES: Brazil, Holtzclaw, Kurucz, Shanahan
NOES: Dawid

5. Continued Discussion of Vehicle Inspection & Maintenance (I&M). The Committee agreed upon the following amendments to the report entitled “Improvements to Enhanced Inspection and Maintenance Program,” dated February 25, 2003:

Under Importance/Implications:

On line two delete “or 2637” in the parenthetical

On line three, replace “country” with “state” and “usually” with “always”

Begin the final sentence with “Important” instead of “The”; replace “shortfall” with “shortfalls” and add “older vehicles” after “gross polluters.”

Under Recommendations:

To Subparagraph (A) add paragraph three from Recommendation A under “Key Issues” immediately after the first sentence.

In Subparagraph (B) change “Issue” to “issue” in the second line and replace “equality” with “equity.”

In Subparagraph (C) replace “BAAQMD” with “District.”

In Subparagraph (E) add “and the District” after “BAR” in the second line. Delete the entire second paragraph and transfer it to the second paragraph under Subparagraph F.

Change Subparagraph F to Subparagraph G and add “fleet” after “private”.

Change Subparagraph G to H, and add after the first sentence: “These are relatively inexpensive devices that are critical to the emission control system and are often related to a vehicle becoming a GPV.”

Change Subparagraph H to I.

Change Subparagraph I to Subparagraph F.

Under *Key Issues*:

In Recommendation A, delete the third paragraph and transfer it to Subparagraph A in the *Recommendations* section.

In Recommendation B, paragraph three, add “District has requested” after “The” and delete “BAR and the BAAQMD are discussing”.

In Recommendation C, replace “BAAQMD” with “the District” in line one and delete “offered by” in line two. In paragraph two, replace “BAAQMD” with “District” in line one, change “buy back” to “buy-back” in line two, and replace “BAAQMD” with “The District” in line three.

In Recommendation D, paragraph five, replace “BAAQMD” with “District”.

In Recommendation E, paragraph two, replace “BAAQMD” with “the District”; and in paragraph three replace “BAAQMD” with “District”.

In Recommendation F, Change to G insert a paragraph mark after the first sentence that ends at “emissions.”

In Recommendation G, Change to H paragraph one, insert “former” before “APCO” in line two.

In Recommendation H, Change to I.

In Recommendation I, Change to F.

Dr. Holtzclaw moved adoption of the text as amended; seconded by Mr. Shanahan; carried unanimously.

6. Discussion of Intermittent Control Measures. Peter Hess, Deputy Air Pollution Control Officer, stated staff is seeking suggestions on intermittent ozone control measures for summer Spare the Air (STA) days. After the Advisory Council reviews the measures suggested by the Technical and Air Quality Planning Committees on March 12, staff will evaluate them for forwarding to the Board and other agencies. The goal is to achieve real emission reductions in ozone exceedance areas. In discussion of the Technical Committee’s list, the Committee members agreed on the following:

- a) Free transit on STA days should be provided to the general public, rather than to only to the employers in the STA Employer Network. This would reduce more vehicular emissions and comprehensively promote the STA program, while also linking the use of public transit to air quality. Funds from increased bridge tolls and parking surcharges on STA days should be allocated to transit agencies to compensate for the loss of fare box revenue. This would broaden awareness of transit options and possibly increase the public’s use of transit beyond STA days. Alternatively, a pilot program STA free transit coupon could be allocated that may be used only on a STA day. This creates an educational tool that provides for accountability. Initially, such coupons could be targeted for use upwind of frequent ozone excess areas.
- b) Owners of vehicles manufactured prior to 1981 should be encouraged to not to drive them on STA days, and instead to take the free public transit that would be offered as an alternative.
- c) Electronic freeway signs should be used to announce a STA day speed limit.

- d) An analysis should be made as to whether legislation would be required to implement parking surcharges and increased bridge tolls on STA days, and to transfer the funds to transit authorities to compensate for fare box revenue losses arising out of the offer of free transit.
- e) Telecommuting should be implemented on STA days. An evaluation should be made of any recent advancement in telecommuting technology that would facilitate its use by more people.

7. Discussion of Committee Process and Schedule for 2003. Dr. Holtzclaw moved approval of the proposed schedule of 9:30 a.m., March 25, May 27, July 22, September 23 and November 18; seconded by Mr. Brazil; carried. The Committee agreed on the following

- the length of Committee meetings should be capped at two hours
- action items for which a quorum is necessary should be placed first on the agenda
- time frames for agenda items should be established
- breaks should taken between major agenda items

8. Committee Member Comments/Other Business. Dr. Holtzclaw indicated that the San Francisco League of Conservation Voters has posted on its website (www.sflcv.org/sprawl) a link to photographs of San Francisco, which calculate surface features including land, concrete, pavement, parking, vehicles, vehicle miles traveled, etc.

Mr. Dawid noted that an air district in California has incorporated a land-use measure that takes into account employer trip generation. David Souten, Principal, ENVIRON International Corporation, explained that the Sacramento Metropolitan AQMD has adopted this with an inter-county and inter-basin application as the issues it addresses originate in pollutant transport. The California Air Resources Board has indicated that the Sacramento AQMD has broad authority to conduct indirect source review. That district subsequently adopted guidelines for exercising such review. Mr. Souten offered to provide relevant documentation to the Deputy Clerk for transmittal to the Committee. Chairperson Kurucz directed that this issue be placed on the agenda for discussion at the March 25 Committee meeting.

The Committee also agreed to review the Public Health Committee's minutes on the issue of fenceline emissions monitoring at refineries and chemical facilities, and also to receive and discuss a presentation by District staff on the status of the I&M program for trucks.

9. Time and Place of Next Meeting. 9:30 a.m., Tuesday, March 25, 2002, Conference Room 716, 939 Ellis Street, San Francisco, California 94109.

10. Adjournment. 11:54 a.m.

Respectfully submitted by

James N. Corazza
Deputy Clerk of the Boards

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

March 5, 2003

To: Advisory Council

From: William Hanna, Chairperson

Re: Advisory Council Action Items: March 12, 2003 Regular Meeting

- (1) For the Sonoma County Climate Protection Campaign request for \$25,000 in District funding to support the Campaign:
 - a) For the initial presentation of the request and its discussion by the Advisory Council, please refer to the January 8, 2003 Advisory Council Regular Meeting Draft Minutes, pp. 5-7.
 - b) For the comments and recommendations of the two Standing Committees to which the proposal was referred at the January 8, 2003 Regular Meeting, please refer to:
 - 1) Technical Committee Draft Minutes of February 4, 2003, pp. 17-18.
 - 2) Air Quality Planning Committee Draft Minutes of February 25, 2003, pp. 19-20.
- (2) For the lists of suggested intermittent control measures, please refer to:
 - a) Technical Committee Draft Minutes of February 4, 2003, pp. 14-16.
 - b) Air Quality Planning Committee Draft Minutes of February 25, 2003, pp. 21-22.
- (3) For the recommendations on particulate matter abatement, please refer to:
 - a) Advisory Council Regular Meeting Draft Minutes of January 8, 2003, pp. 7-8.
 - b) "Particulate Matter Abatement," adopted December 10, 2002 by the Public Health Committee and attached as Agenda Item No. 4d.3, pp. 24-26.
- (4) For the recommendations on improving enhanced vehicle inspection & maintenance, please refer to:
 - a) Air Quality Planning Committee Draft Minutes of February 25, 2003, pp. 20-21.
 - b) Technical Committee Draft Minutes of February 4, 2003, pp. 16-17.
 - c) Air Quality Planning Committee recommendations entitled "Improvements to Enhanced Inspection and Maintenance Program," dated February 25, 2003, and attached as Agenda Item No. 4d.4, pp. 28-33.

December 10, 2002: Adopted by the Public Health Committee
January 8, 2003: Referred by the Advisory Council to the Technical Committee

To: William Hanna, Chairperson, and Members of the Advisory Council
From: Brian Zamora, Chairperson, and Members of the Public Health Committee
Subject: Particulate Matter Abatement

Topic

Reduction of particulate matter (PM).

Importance/Implications

The District will soon be responsible to further reduce PM10 and PM2.5 in the Bay Area as a result of more stringent state standards. The revised standards result from a large body of evidence that PM contributes to premature death and multiple health conditions in the population; there is particular concern about the growing numbers of children with asthma. Continuing reductions in PM will require multiple and creative programs on the part of the District.

Recommendations

1) The Council applauds the District's rejuvenation of the "Don't light tonight" program. We strongly recommend that the District develop and implement a multi-year plan, with milestones and a timetable, to reduce the District's current 65 ug/m³ trigger (the national 24-hour standard) to the PM 2.5 air quality subindex of 40. u/m³. That is a level which USEPA has determined causes unhealthful effects in sensitive groups.

We also recommend that the District:

2) evaluate the "Don't light tonight" program with regard to public awareness and actions taken in response to the alerts.

3) map PM concentrations in areas of likely concern (e.g., populated inland valleys) during winter days and nights, including weekends, using appropriate portable PM monitoring devices. These efforts should examine temporal PM profiles, not just 24-hour averages. The information will assist in determining control strategies, publicizing the problem, and building public awareness and support for District efforts.

4) for both educational and data-gathering purposes, give grants and support others' grants to school districts to buy portable PM monitoring devices for student use, or loan such devices to school districts to map local emissions. Provide technical support for this effort, and seek coordination with local health and environmental health officials. (Appropriate devices are now relatively inexpensive.)

- 5) compare real-time and 24-hour average PM data from regional District monitors to see if they reflect micro-environmental PM concentrations tracked under (2) and (3) (above).
- 6) consider making the case for fireplace change-out on sale of a home, a provision omitted from the District's model ordinance on wood smoke, which now addresses only new sources of wood smoke, i.e. new home construction. Continue to seek funding for change-out programs and other incentive programs, especially in areas of likely concerned and other areas identified through activities in (3) above.
- 7) continue to provide dedicated staff support for advocacy of the wood smoke ordinance and its adoption by local jurisdictions.
- 8) continue its support for a CARB resolution on diesel bus idling near schools. Support bus design changes so that air conditioning and heat do not require idling. Look at other situations where buses congregate and idle where there are large numbers of people (e.g., airports) to see whether a similar ban would be warranted.
- 9) reconsider the use of emissions credits for PM reductions.
- 10) *[Additions e.g. from the Technical Committee re: particulate trap retrofit program for public transit buses?]*

Key Issues

1. Particulate matter (PM) is associated with an increased death rate overall and from specific diseases, such as respiratory and cardiovascular disease. Between the least and most polluted cities in the United States, the average life expectancy reduction is estimated at 1.5 years less for every PM increase of 50 ug/m³. Some 200 Bay Area residents die prematurely from elevated PM levels, according to risk assessments.

2. PM is also associated with many illnesses, as reflected in studies showing associations with cardiovascular and respiratory hospitalizations, emergency room visits, school absenteeism, asthma attacks, bronchitis and other respiratory symptoms in children, and decreased lung function. Recent studies suggest that exposure during pregnancy may be related to birth defects, low birth weight, prematurity and infant mortality.

Another recent study showed elevated lung cancer deaths in areas with higher PM.
 [C. Arden Pope et al. (2002) "Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Pollution," *Journal of the American Medical Association*, Vol. 287, No. 9.]

3. Studies also point to woodburning as a significant source (when multiplied by thousands of lighted fireplaces) of two of the toxics that were recently identified as having a differential impact on children: dioxin and dioxin-like compounds, and polycyclic aromatic hydrocarbons. CARB is in the process of evaluating these compounds under SB 25 for further toxic control measures.

4. No threshold has been detected below which health effects do not occur.

5. A number of issues remain unresolved, including the PM size and composition most associated with various health effects and the mechanism(s) that causes the effects. Nonetheless, the consistency in the research findings noted above has produced a consensus that PM is a significant public health problem.

6. CARB is expected to issue new regulations to achieve the lower standards for PM10 and PM2.5, likely early in 2003.

7. Bay Area monitoring data show that, although the District has a long history of regulating PM and trends in PM10 are downward for the last 15 years, several sites will not meet the new annual-average state standards of 20 ug/m³ for PM10 and 12 ug/m³ for PM2.5. Elevated PM here occurs especially from October through January; the two principal (and roughly equal during this time period) sources on an annual basis are wood smoke and cooking, and fossil fuels (principally from mobile sources).

Information Considered

Members considered reports to the Committee from:

- Dr. Bart Ostro, Cal/EPA-OEHHA, co-author of “Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates,” May 3, 2002 (Cal/EPA-OEHHA and ARB);
- Dr. David Fairley, District Statistician, BAAQMD, author of “Daily Mortality and Air Pollution in Santa Clara County, California: 1989-1996,” Environmental Health Perspectives, Vol. 107, No. 8, August 1999;
- Mr. Thomas Perardi, Planning Division Director, BAAQMD;
- and information from Michael Lipsett et al., “Air Pollution and Emergency Room Visits for Asthma in Santa Clara County, California,” 1997 Environmental Health Perspectives, Vol. 105, pp. 216-22.

Deliberative Process

The Public Health Committee was asked to consider this topic by Council Chairperson Sawyer as part of its work for 2002. The Committee met on February 25, April 29, June 17, September 9, October 28, and December 9, 2002 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.

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

February 25, 2003

To: William Hanna, Chairperson, and Members of the Advisory Council
From: Kraig Kurucz, Chairperson, and Members of the Air Quality Planning Committee
Subject: Improvements to Enhanced Inspection and Maintenance Program

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.
- (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. 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 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 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 Committee agreed to ask the Technical Committee to review 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.

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 O₂ 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.

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.

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 the California Council on Environmental and Economic Balance (CCEEB) on a remote sensing program conducted in Sacramento indicates that 66% 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.

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 NO_x, CO and ROG. However, a different 5% of the fleet is responsible for ROG, than for NO_x or for CO. Different types of mechanical failures lead to increased NO_x 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.

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.

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