



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
EXECUTIVE COMMITTEE MEETING

COMMITTEE MEMBERS

GAYLE B. UILKEMA – CHAIR
CHRIS DALY
JERRY HILL
JOHN SILVA
BRAD WAGENKNECHT

MARK ROSS – VICE CHAIRPERSON
ERIN GARNER
PATRICK KWOK
TIM SMITH

THURSDAY
DECEMBER 21, 2006
9:30 A.M.

FOURTH FLOOR CONFERENCE ROOM
DISTRICT OFFICES

AGENDA

1. **CALL TO ORDER – ROLL CALL**
2. **PUBLIC COMMENT PERIOD** (*Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3*) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 939 Ellis Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.
3. **APPROVAL OF MINUTES OF SEPTEMBER 13, 2006**
4. **QUARTERLY REPORT OF THE HEARING BOARD - JULY 2006 - SEPTEMBER 2006**
T. Trumbull /4965
TerryT1011@aol.com
5. **REPORT OF THE ADVISORY COUNCIL: SEPTEMBER 2006 – NOVEMBER 2006**
K. Kurucz/4965
Kraig.I.Kurucz@intel.com
 - A. *Report of Advisory Council activities.*
 - B. *Presentation of Recommendation for Wood Burning Control Strategies.*
6. **PRODUCTION SYSTEM PROJECT PLAN**
J. McKay/4629
jmckay@baaqmd.gov

The Committee will receive a status report on progress made with regard to the Production System.
7. **CONSIDERATION OF BOARD OF DIRECTORS' ATTENDANCE AT THE A&WMA'S PEOPLE TO PEOPLE PROGRAMS 2007 DELEGATION TO CHINA** J. Broadbent/5052
jbroadbent@baaqmd.gov

The Committee will consider recommending Board of Directors' approval for attendance of Board members at the Air & Waste Management Association's People to People Ambassador Program 2007 delegation to meet in China.

8. JOINT POLICY COMMITTEE UPDATE

J. Roggenkamp/4646
jroggenkamp@baaqmd.gov

Ted Droettbomm will provide an update on the activities of the Joint Policy Committee.

9. COMMITTEE MEMBER COMMENTS/OTHER BUSINESS

Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2).

10. TIME AND PLACE OF NEXT MEETING AT THE CALL OF THE CHAIR

11. ADJOURNMENT

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

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

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

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chair Gayle B. Uilkema and Members
of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 24, 2006

Re: Executive Committee Draft Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Executive Committee meeting of September 13, 2006.

DISCUSSION

Attached for your review and approval are the draft minutes of the September 13, 2006 Executive Committee meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

**Bay Area Air Quality Management District
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000**

DRAFT MINUTES

Summary of Board of Directors
Executive Committee Meeting
9:30 a.m., Wednesday, September 13, 2006

1. **Call to Order - Roll Call:** Chair Gayle B. Uilkema called the meeting to order at 9:30 a.m.
Present: Gayle B. Uilkema, Chair, Chris Daly (9:44 a.m.), Jerry Hill (9:31 a.m.), Mark Ross, John Silva, Tim Smith, Brad Wagenknecht.
Absent: Erin Garner, Patrick Kwok.
2. **Public Comment Period:** There were no public comments.

Director Jerry Hill arrived at 9:31 a.m.
3. **Approval of Minutes of May 30, 2006:** Director Ross moved approval of the minutes; seconded by Director Silva carried unanimously without objection.
4. **Report of the Advisory Council: May 10 – August 9, 2006**

Kraig Kurucz, Advisory Council Chairperson, presented the report and noted that several members of the Advisory Council attended the Air & Waste Management Association Conference in New Orleans. Mr. Kurucz provided a brief update on the following key topics the Council is working on: particulate matter, woodsmoke, greenhouse gas programs, and the Community Air Risk Evaluation (CARE) Program. Mr. Kurucz updated the Committee on discussions the Council has had regarding its role in outreach to the community.

Committee Action: None. This report provided for information only.
5. **Quarterly Report of the Hearing Board – April 2006-June 2006:** Hearing Board member Terry Trumbull presented the Hearing Board Quarterly Report – April 2006 – June 2006.

Committee Action: None. This report provided for information only.
6. **Consider Authorizing the Executive Officer/APCO to Initiate Program with the Sacramento Metropolitan Air Quality Management District:** *The Committee considered recommending that the Board of Directors' authorize the Executive Officer/APCO to initiate a program with the Sacramento Metropolitan Air Quality Management District for joint use of Carl Moyer Program Funds for multi-regional projects as a result of amendments to SB 225.*

Jack Broadbent, Executive Officer/APCO, presented the report and stated that SB 225 is on the Governor's desk. The bill changes the formula for distribution of Carl Moyer funds and would increase the percentages of the allocation to districts that are based on population and severity of air quality problems.

Director Chris Daly arrived at 9:44 a.m.

The Bay Area District and the Sacramento Metropolitan AQMD would like to initiate a program whereby Carl Moyer Funds would go towards multi-regional projects. Staff recommended that the Committee recommend that the Board of Directors' authorize the Executive Officer/APCO to initiate a program with the Sacramento Metropolitan AQMD with the allocation of \$500,000 each year from Carl Moyer Program funds towards multi-regional projects as a result of the amendments to SB 225 currently on the Governor's desk. The Sacramento Metropolitan Air Quality Management District's Board of Directors unanimously approved the program and a matching allocation of \$500,000 in Carl Moyer Program funds.

Committee Action: Director Wagenknecht moved the staff recommendation; seconded by Director Smith; carried unanimously without objection.

7. Spare the Air Program Update: *Staff provided an update on the Spare the Air program.*

Mr. Broadbent stated that the Spare the Air season started June 1st and will end on October 13th. September 12th was another Spare the Air day with temperatures in the 100's in the East Bay. Mr. Broadbent noted that there were five exceedances of the state 8-hour standard and two exceedances of the state one-hour standard.

Jack Colbourn, Director of Outreach and Incentives, stated that 26 transit agencies participated in the free fare days and region-wide, transit ridership increased 15%. The survey results were discussed and the behavioral changes people made were highlighted. The preliminary emission reductions on the six free fare days were reviewed and Mr. Broadbent stated that the average reduction amounted to one ton a day. In response to a question from Director Ross, Mr. Colbourn stated that the emission reduction statistics for the non-free fare days will be provided at a later date.

Mr. Colbourn reviewed some of the customer complaints that the District received. The Air District sent response letters regarding comments received on the Spare the Air campaign. Chair Uilkema requested that staff prepare a binder of the responses and have it available at the Board meeting for Directors to review. Director Daly requested that a Spare the Air fact sheet be available on the District's web site.

Mr. Broadbent presented potential refinements to the free transit program for consideration for next year's campaign. Potential funding sources for next year were also discussed. Chair Uilkema requested that the Advisory Council review possible funding sources, or sponsors, for the Spare the Air campaign and also consider a list of stationary sources that could potentially curtail operations on Spare the Air Days.

Committee Action: None. This report provided for information only.

8. **Community Air Risk Evaluation Program Update:** *Staff provided an update of the Community Air Risk Evaluation (CARE) program.*

Philip Martien, Ph.D., Senior Advanced Projects Advisor, presented the report and reviewed the CARE Program objectives, the emissions concentrations, exposure, and health effects. The CARE Program is a multi-phase program and Phase I concentrated on the development of toxic air contaminants (TAC) emissions estimates. Dr. Martien reviewed demographic and health data, and target areas for Carl Moyer grants. The findings from Phase I were discussed as well as mitigation approaches. Phase I is near completion.

Phase II will focus on modeling concentrations and continued mitigation. Dr. Martien noted that all three phases of the CARE Program include mitigation measures. An update on the CARE Program will be presented to the full Board at a future meeting.

Committee Action: None. This report provided for information only.

9. **Presentation of Mercury Emissions from Crematories:** *Staff gave an informational presentation on mercury emissions at crematories.*

Brian Bateman, Director of Engineering, presented the report and reviewed background information on mercury; its health effects; mercury emissions from crematories, which are estimated to be 27 pounds per year; the regulation of mercury from crematories; and the amount of mercury found in the San Francisco Bay.

Chair Uilkema requested that staff send a copy of the study on mercury to the community members who wrote letters regarding mercury emissions from crematories.

Committee Action: None. This report provided for information only.

10. **Joint Policy Committee Update:** *Ted Droettbomm provided an update on the activities of the Joint Policy Committee.*

Mr. Droettbomm reviewed the progress of the *Focusing Our Vision* program; smart growth and goods movement discussions; meetings held with local governments; the Technical Advisory Committee; and provided a legislative update.

Committee Action: The Committee received and filed the report.

11. **Committee Member Comments/Other Business:** There were none.

12. **Time and Place of Next Meeting:** At the Call of the Chair.

13. **Adjournment.** The meeting was adjourned at 11:30 a.m.

Mary Romaidis
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

TO: Chair Uilkema and Members
of the Executive Committee

FROM: Chairperson Thomas M. Dailey, M.D., and Members of the Hearing Board

DATE: October 24, 2006

RE: Hearing Board Quarterly Report – JULY 2006 – SEPTEMBER 2006

RECOMMENDED ACTION:

This report is provided for information only.

DISCUSSION:

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
Alameda/Berkeley	PACIFIC STEEL CASTING CO. (Appeal – Docket No. 3520) – Appeal of Pacific Steel Casting co., from the APCO’s issuance of Designated Permit Conditions in an Authority to Construct at Facility No. 1603 – Pro Forma Hearing	Appeal	Administrative Record & Evidentiary Hearing scheduled for 10/26/06, and a further hearing on 11/2/06, if necessary	===	===
Contra Costa/Concord	SFPP, L.P. (Variance – Docket No. 3517) – Variance from regulation requiring compliance with permit conditions	2-1-307	Withdrawn. In compliance	===	===
Contra Costa/Pinole	TWO FOUR ONE, INC. (Variance – Docket No. 3519) – Variance from regulation limiting emissions of organic compounds from gasoline dispensing facilities (APCO opposed.)	8-7-302.1	Withdrawn	===	===
Contra Costa/Richmond	CHEVRON U.S.A., INC. (Appeal – Docket No. 3496) – Appeal from the issuance of Major Facility Review Permit Reopening – Revision 1.5 for Facility No. A0010 (Chevron Products Company, Richmond Refinery)	Title V	Withdrawn. In compliance with applicable federal combustion efficiency standards	===	===
Santa Clara/Cupertino	HANSON PERMANENTE CEMENT, INC. (Appeal – Docket No. 3447) – Appeal from the APCO’s issuance to Hanson Permanente Cement of a Major Facility Review Permit for Facility No. A0017	Title V	Withdrawn. Revisions to Permit adequately addresses issues in the Appeal	===	===

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
Santa Clara/Milpitas	HEADWAY TECHNOLOGIES, INC. (Variance – Docket No. 3521) – Variance from regulation requiring compliance with permit conditions.	2-1-307	Withdrawn	===	===
Santa Clara/San Jose	SINGLETON ROAD LANDFILL (Variance – Docket No. 3515) – Variance from regulation requiring compliance with permit conditions; from regulation to provide for the review of new and modified sources and provide mechanisms for BACT, TBACT, and emission offsets, by which authorities to construct such sources may be granted; and from regulation limiting emissions of non-methane organic compounds and methane from the waste decomposition process at solid waste disposal sites (APCO opposed.)	2-1-307 [Condition #17547 (1) (2a) (2b) (2c)] 2-2-112 8-34-113.2, 301 (Parts 2 & 3) & 303	Denied	===	(VOC)
Santa Clara/San Jose	SFPP, L.P. (Variance – Docket No. 3516) – Variance from regulation requiring compliance with permit conditions and from regulation limiting emissions of organic compounds from gasoline transfer operations at gasoline bulk terminals and delivery vehicles – <i>Interim Variance Hearing</i>	2-1-307 8-33-301	Withdrawn. Applicant implemented short-term alternatives to be in compliance	===	===
Santa Clara/San Jose	SFPP, L.P. (Variance – Docket No. 3516) – Variance from regulation requiring compliance with permit conditions and from regulation limiting emissions of organic compounds from gasoline transfer operations at gasoline bulk terminals and delivery vehicles – <i>Full Variance Hearing</i>	2-1-307 8-33-301	Withdrawn. In compliance	===	===
Solano/Fairfield	ANHEUSER-BUSCH, INC. (Variance – Docket No. 3518) – Variance from regulation requiring compliance with permit conditions (APCO not opposed.)	2-1-307 (Condition # 16202, Items 1c & 3)	Granted	7/25/06-10/22/06 or until the date when APCO issues permit modification to Applicant, whichever occurs first	0.03 #/Day (NPOC [Acetone])
Sonoma/Santa Rosa	JDSU-Flex Products Group (Variance – Docket No. 3523) – Variance from regulation requiring compliance with permit conditions – <i>Interim Variance Hearing</i>	2-1-307	Withdrawn	===	NPOC - Acetone

NOTE: During the third quarter of 2006, the Hearing Board dealt with three Dockets on three hearing days. No excess emission fees were collected during this quarter.

Respectfully submitted,

Thomas M. Dailey, M.D.
Chair, Hearing Board

Prepared by: Neel Advani
Reviewed by: Mary Romaidis

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chair Gayle B. Uilkema and Members
of the Board Executive Committee

From: Kraig Kurucz, Chairperson, Advisory Council

Date: December 6, 2006

Re: Report of the Advisory Council: September 6 – November 8, 2006

RECOMMENDED ACTIONS:

- (A) Receive and file the attached minutes.
- (B) Receive presentation regarding recommendation regarding Wood Burning Control Strategies.

DISCUSSION:

At the November 8, 2006 Regular meeting of the Advisory Council, the calendar year Council Officers were elected. Chairperson Kurucz will announce the slate of Advisory Council Officers for 2007 at the December 21, 2006 Board Executive Committee meeting.

Presented below are summaries of the key issues discussed at meetings of the Advisory Council and its Standing Committees during the above reporting period.

1. Public Health Committee Meeting of September 6, 2006. The Committee received a summary of the 2005-06 Spare the Air Tonight Survey results and a presentation from Jenny Bard of the American Lung Association on the ALA's recommendations on wood smoke abatement for the Bay Area.
2. Regular Meeting of September 13, 2006. The Council received a presentation from Advisory Council member Robert Bornstein, Ph.D. on data regarding trends in global warming in light of observations made concerning regional patterns of annual-averaged daily minimum and maximum temperatures. It also received and discussed its Standing Committee reports and the report of the Executive Officer.
3. Public Health Committee Meeting of October 10, 2006. The Committee discussed the draft recommendations regarding Wood Smoke Emissions. The Committee also discussed recent presentations regarding indoor air quality and asthma and determined what the next steps should be.
4. Air Quality Planning Committee Meeting of October 11, 2006. The Committee heard a presentation from Committee Chair Stan Hayes regarding AB 32 and its requirements and implementation schedule. The Committee discussed the possible implications of AB 32's passage for the Air District's Climate Protection Program and future Committee and full Advisory Council actions. The Committee also discussed the initiation of planning efforts to implement the Advisory Council's climate change motion adopted at its September

meeting. The motion established as a Council goal the reduction of its carbon footprint beyond carbon neutral to achieve AB 32's greenhouse gas reduction targets.

5. Regular Meeting of November 8, 2006. The Council considered the Public Health Committee's recommendation on Wood Burning Control Strategies. It also received and discussed its Standing Committee reports and the report of the Executive Officer.

Respectfully submitted,

Kraig Kurucz
Advisory Council Chairperson

Prepared by: Mary Romaidis

FORWARDED BY: _____

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

APPROVED MINUTES

Advisory Council Public Health Committee Meeting
10:00 a.m., Wednesday, September 6, 2006

- 1. Call to Order – Roll Call.** Chairperson Bramlett called the meeting to order at 10:03 a.m. Present: Jeffrey Bramlett, Chairperson, Janice Kim, M.D. (10:06 a.m.), Steven Kmucha, M.D., Karen Licavoli-Farnkopf, MPH, Linda Weiner, Brian Zamora. Absent: Cassandra Adams.
- 2. Public Comment Period.** There were no public comments.
- 3. Approval of Minutes of May 10, 2006.** Mr. Zamora moved approval of the minutes; seconded by Dr. Kmucha; carried unanimously.
- 4. Summary of the 2005-06 Woodsmoke Survey:** *Staff presented a summary of the 2005-06 Spare the Air Tonight Survey results.*

Judi Goldblatt of Outreach and Incentives presented the report and stated that the survey was conducted last winter. The purpose of the survey is to help better understand public attitudes about wood burning. In response to SB 656, the scope of the survey was increased this year. SB 656 requires the Air Resources Board and local air district to develop and adopt control measures that can be used to reduce PM10 and PM2.5. The District is also developing an updated profile of wood burning behavior in the Bay Area. The most recent inventory was conducted in 1988. The survey is a way for the District to judge awareness of the Spare the Air Tonight program and knowledge of the air quality issues surrounding wood burning.

There were 2,625 Bay Area residents surveyed by random digit dialing. In response to the SB 656 requirements, this was a larger sample survey than in the past and it was conducted in November 2005 through February 2006 on 28 randomly selected dates. To obtain statistically reliable estimates, the survey employed a sampling strategy that involved stratification by county, month and day type. The District supplied meteorological data that was overlaid with the survey data to create more statistically reliable information. Several of the questions used the same methodology that was used to measure the impact of the summer Spare the Air Program on driving behavior.

Councilmember Janice Kim, M.D. arrived at 10:06 a.m.

Ms. Goldblatt discussed the following topics:

Wood Burning Behavior: Sixty-four percent of households within the District contain at least one fireplace, pellet stove or wood stove. Wood is the most commonly used fuel, followed by natural gas and manufactured logs. Of the households that burn wood, 50% indicated that they primarily do so for ambiance rather than for heat. Approximately 8% of the people surveyed

reported that they were not using their fireplaces because of air quality reasons and an additional 8% stated health-related reasons. Fifty-six percent of households that owned wood burning heating devices and burned wood this past season reported that they anticipated burning wood at the same frequency as they did in the previous season. Of the 22% of households that expected to burn more frequently this winter, compared to last winter, about half stated it was due to the high cost of energy. Approximately half of the households that expected to burn wood this winter anticipated doing so on a weekly basis. Burning time averages 3.8 hours and consumption averages over 5 logs. Seventeen percent of all households indicated they burn wood during at least one non-winter month.

Wood Smoke Attitudes: Approximately 66% of adults perceive negative health effects from breathing wood smoke. The specific health effects identified focused on lung disease and, more specifically, asthma. Eighteen percent of adults perceive that their neighborhood periodically experiences some pollution from wood smoke. There were 12 % that stated the problem was a small one, 4% thought it was a moderate problem, and 1% felt that wood smoke was a big problem in their neighborhood. Seventy-four percent of Bay Area adults support a policy prohibiting wood burning on nights when air pollution is expected to reach unhealthy levels.

Changing Heating Devices: The survey indicated that 28% of the respondents who owned a wood burning fireplace and/or non-EPA certified wood stove or pellet stove were willing to replace their current device with a gas fireplace without a financial incentive. Of those, 34% were willing to replace their current device with an EPA certified device without a financial incentive. When asked if they would replace their heating device with an incentive, 10% of those who were initially unwilling to replace the device without an incentive, were willing to do so if a \$200 rebate was offered. As the rebate amount increased, the number of people willing to change-out their device also increased.

A large number of Bay Area adults surveyed, 61%, support a policy to require new housing construction that has only gas fireplaces or EPA certified wood burning devices. In addition, 50% would support a policy that would require older wood stoves to be removed or replaced with a cleaner burning model when a home is sold to a new owner.

The survey results indicated that 56% of those surveyed had heard of the Air District and 46% had heard of the Spare the Air Tonight Program. Approximately 34% of the respondents recalled being exposed to news stories, advertisements or public service announcements related to the Spare the Air Tonight Program during the three months prior to the survey.

In conclusion, Ms. Goldblatt stated that those that burn wood frequently (49%), defined as someone who burns at least once a week, burn significantly more hours during the day. Frequent burners primarily build fires for heat and tend to burn 4.6 hours on average per day and burn 6.2 logs per burn day. In the predominately rural counties, there are significantly higher numbers of frequent burners than in the rest of the Air District. The survey shows that 43% of Sonoma County households with burning devices burn once a week, compared to 21% in San Francisco.

Public awareness of the District is wide-spread and the Program has raised public recognition of the negative health impacts of breathing wood smoke by 17% since 2002. Ms. Goldblatt stated that it is estimated that 2% of adults living in a household with at least one fireplace, wood stove

or pellet stove reduced the amount of wood they burned during the winter of 2005-2006 in direct response to the Spare the Air Tonight campaign.

In response to questions from the Committee, Ms. Goldblatt stated:

- Of those people who burn a lot and responded positively to the financial incentives on change outs, it did not seem that there was a direct correspondence to the socio-economic criteria.
- When the household is located in a rural area, there is more wood burning for heat.
- Information will be provided to the Committee regarding rural counties and if residents responded positively to the financial incentives for a change-out.
- The District receives many calls about financial incentives for change-outs for wood burning stoves.
- Information on peoples burning habits as they related to the severity of the weather last winter was not available at this time.
- The study indicated that people who burn for heat are going to burn for heat anyhow and, based on the information obtained, they burn frequently fairly consistently.
- Health effects are spread throughout the nine Bay Area counties.
- The reduction of burning is not in the areas that rely on burning for heat as opposed to ambiance.
- Information on health-related questions will be provided in the future.
- Information on alternative fuels, such as propane, butane, or natural gas, and its availability to people who burn for heat was not a question on the survey.

5. American Lung Association (ALA) Recommendations on Wood Smoke: *Jenny Bard, American Lung Association, presented the ALA's recommendations on wood smoke abatement for the Bay Area.*

Ms. Bard reviewed an American Lung Association letter addressed to the Public Health Committee, dated July 5, 2006. The recommendations listed in the letter are based on the experience of best practices from other areas, including Puget Sound in the state of Washington. The list of the ALA's recommendations should be looked at as a comprehensive approach and should be implemented together in order to have the most impact on reducing the wood smoke problem.

Ms. Bard stated that the ALA has looked at the approach of voluntary model ordinances being adopted by cities and counties. The ordinances have been successful in some reductions of wood smoke, but there are people who are still continuing to burn and are causing pollution in their neighborhoods. California Breathing recently put out statistics on the prevalence of lung disease and there are now 935,000 people in the Bay Area who have asthma and another 300,000 people that have chronic obstructive pulmonary disease.

Ms. Bard reviewed the recommendations as stated in the letter:

1. Instate a mandatory wood burning curtailment when predicted particulate matter concentrations approach unhealthful levels. This is a critical first step that would help prevent the Air District from being in non-attainment with expected new Environmental Protection Agency (EPA) PM2.5 standards for particle pollution. It also recognizes that

the current levels are too high and are causing health impacts. The ALA has recommended a 24-hour standard of 25 micrograms per cubic meter. The ALA recommends that the Advisory Council consider a level that is the most health protective standard.

2. Enact an opacity regulation applicable to residential wood burning. This would set an effective standard for quantifying irresponsible or frequent wood burners that create excessive amounts of air pollution and poses a hazard to public health. In 1994 the Public Health Committee proposed an opacity rule and the ALA feels this is the best way to address wood smoke pollution in a neighborhood.
3. Create a list of “prohibited fuels” that cannot be burned in residences. Many cities and counties have already adopted the model ordinance, which includes this feature. The ALA has added no burning of wood having a moisture content of greater than 20%. Burning green wood causes excessive wood smoke levels in neighborhoods.
4. Have active and visible enforcement of improper wood burning. It is important that enforcement is done on the week ends and at night, at least for the first few years until people are educated.
5. Establish a Complaint Program with an effective response. The Puget Sound program has set up a successful program for responding to complaints. Options include stop burning, upgrade the system, or pay a fine.
6. Continue to promote the Model Ordinance in communities throughout the Bay Area. Napa County is the only county that has not adopted the model ordinance. There are several cities throughout the area that are in the process of adopting an ordinance.
7. Define and prohibit improper wood burning. This is an educational issue and currently there is not a clear understanding of what is improper burning.
8. Fund an effective public outreach and education effort. The ALA will work with the Air District on a strong outreach and education program on the health effects of particle pollution.
9. Install additional PM 2.5 monitors. The ALA would like to see monitors installed in Marin, Contra Costa and Napa counties. This would help in understanding the air quality levels in the localized areas and it would provide additional data.

In response to questions from the Committee Ms. Bard stated that:

- The standard is 65 micrograms per cubic meter and the ALA is recommending 25.
- Puget Sound has been successful in enforcing their regulation and handling complaints.
- The ALA would welcome targeting certain areas in the Bay Area first.
- The City of Mill Valley adopted a moisture content rule when they adopted their ordinance. The ALA purchased a device for their use at a cost of about \$350.

Kelly Wee, Director of Compliance and Enforcement, stated that the District does not have a regulation right now on wood smoke. The District is working with this Committee for a recommendation to begin the process of the promulgation of a regulation on wood smoke. Mr. Wee explained that current District rules have specific exemptions which exempt fireplaces for home heating. In a future regulatory program, this exemption would be removed and new regulations would be put in place. Inspectors are educating people that are burning and advising them of the impacts of wood smoke on their community and nearby residents.

In response to questions from Dr. Kim, Mr. Wee stated that in all the control programs there is usually an exemption in the rule if wood burning is the only source of heat for the home. This Air District's rule would have a similar provision. There is no provision regarding poor heating practices. Households would still have to burn in a clean and efficient manner.

In response to a question from Mr. Zamora, Mr. Wee stated that opacity is covered under District Regulation 6. This regulation deals with PM emissions from sources like cement plants and fugitive emissions. The District inspectors are trained to read the opacity of plumes.

6. Discussion on Wood Smoke Abatement: *The Committee reviewed the information on wood smoke abatement received to date, and considered next steps.*

Chair Bramlett noted that the recommendations from today would go to the full Council and a final version would be presented at the November meeting of the Committee.

Mr. Hess stated that last November a list of issues was brought to the Council for review. One of the issues was moving into a regulatory program on wood smoke and the issue was referred to the Public Health Committee. The Committee has heard about the impact of wood smoke on ambient air quality readings; what the impact is on the air quality standards; and received information on the Community Air Risk Evaluation (CARE) Program. The Committee also heard a presentation on the Puget Sound program and received information from the San Joaquin Valley Unified Air District.

Mr. Hess stated that the Air District staff is requesting that the Public Health Committee and the full Advisory Council provide recommendations on the development of a regulatory program for wood smoke. Once the recommendations have been finalized, staff will move forward to put together a regulatory program.

In response to an earlier question from Mr. Zamora, Mr. Hess stated that State law provides that the Air District can have a more stringent regulation than State regulations. Regulatory development would include opacity limits, the possibility of a rebate program, public outreach, education, enforcement, and possibly phased implementation in certain jurisdictions.

Ms. Licavoli-Farnkopf recommended that the Committee adopt the nine points that were brought by the Lung Association and put them into a regulatory fashion. Ms. Weiner added that it is important to do this now for attainment reasons, and that all of the studies in the past have proven that much more is known about the negative effects of particulate matter than a number of years ago.

Chairperson Bramlett discussed five broad categories under consideration by the members for recommendation to the full committee as follows:

1. Continue with existing wood smoke program, such as the model ordinance, and continue monitoring of localized community PM levels.
2. Expand outreach; increase public awareness of wood smoke impacts on PM levels and harmful effects of elevated PM; and increase the public's understanding of how they can reduce wood smoke emissions.

3. Look at utilization of incentives in the elimination of conventional stoves and fireplaces. Consider partnerships with outside agencies in which to fund replacements and consider a wood stove crushing program.
4. Adopt a two-stage wood smoke curtailment program: a) voluntary, such as the Spare the Air Tonight Program; and b) a mandatory curtailment program.
5. Staff to come back to the Committee so progress can be monitored.

Chairperson Bramlett reviewed the five categories and how they relate to the nine recommendations from the ALA for inclusion in the recommendations.

There was discussion on the installation of additional PM2.5 monitors, particularly in the northern counties. Mr. Hess stated that installation of additional PM2.5 monitors may be one of the most expensive items. The District would like to go into certain communities that are experiencing high levels to get what those levels would be. As an alternative, the District could go into the communities with hand-held monitors to read the particulate levels. Installation of stationary PM2.5 monitors must be within the federal criteria for monitoring.

Ms. Licavoli-Farnkopf recommended including the additional monitors in the recommendations. It would increase monitoring in the high risk areas, whether with the hand-held devices, or stationary monitors if they meet the federal standards. The recommendation could be crafted however it would work for the District.

Ms. Weiner emphasized that for those low income people who use wood burning stoves as a source of heat, research should be done on alternatives so that they could reduce their wood smoke emissions. Mr. Hess noted that this issue will come up during the regulatory process and will be addressed.

Mr. Zamora stated that this regulation should focus on the human health side of the wood smoke issue. Mr. Hess responded that the Committee may want to add a few sentences in its recommendation regarding this issue.

Chairperson Bramlett stated that he will have the recommendations together by the next meeting and that his report to Chair Kurucz will be prepared in advance of the November meeting and provided to him in final form.

Committee Action: Mr. Zamora moved that the Committee support the recommendations discussed by the Committee; seconded by Ms. Weiner; carried unanimously without objection.

7. **Committee Member Comments/Other Business.** There were none.
8. **Time and Place of Next Meeting.** 10:00 a.m., Tuesday, October 10, 2006, 939 Ellis Street, San Francisco, CA 94109. Topics for the meeting will be indoor air quality, asthma, and the recommendations on wood smoke.
9. **Adjournment.** The meeting adjourned at 11:17 a.m.

Mary Romaidis
Clerk of the Boards

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

APPROVED MINUTES

Advisory Council Regular Meeting
10:00 a.m., Wednesday, September 13, 2006

CALL TO ORDER

Opening Comments: Chairperson Kurucz called the meeting to order at 10:05 a.m.

Roll Call: Present: Kraig Kurucz, Chair, Sam Altshuler, P.E., Louise Bedsworth, Ph.D., Ken Blonski, Robert Bornstein, Ph.D., Jeffrey Bramlett, Harold Brazil (10:10 a.m.), Irvin Dawid, Emily Drennen, Fred Glueck, William Hanna (10:10 a.m.), Stan Hayes, John Holtzclaw, Ph.D., Janice Kim, M.D., Steven Kmucha, M.D., Ed Proctor, Linda Weiner, Brian Zamora.

Absent: Cassandra Adams, Karen Licavoli-Farnkopf, MPA

Council members Brazil and Hanna arrived at 10:10 a.m.

PUBLIC COMMENT PERIOD:

James Corazza
Deputy Clerk of the Boards
Bay Area Air Quality Management District

Mr. Corazza addressed the Advisory Council and bid farewell to the members since he was leaving the District after 21 years of service. The Council members commended and applauded Mr. Corazza for his service to the Advisory Council.

CONSENT CALENDAR:

- 1. Approval of Minutes of July 12, 2006.** Dr. Holtzclaw pointed out that on Page No. 2, Item No. 4, in the third sentence of the minutes, the word “years” should be added after “80”. Mr. Proctor moved approval of the minutes, as corrected; seconded by Mr. Bramlett; carried unanimously.

COMMITTEE REPORTS

- 2. Air Quality Planning Committee Meeting of August 9, 2006.** Mr. Hayes stated that the Committee received staff presentations on methane gas recovery at landfills and the revision of the District’s guidance on the inclusion of climate change categories and air quality elements in local general plans and the California Environmental Quality Act review process.

Mr. Hayes distributed the “Carbon Footprint Analysis: BAAQMD Advisory Council Air Quality Planning Committee” to the members for their review. Mr. Hayes referred to a motion that was adopted at the last Planning Committee meeting whereby the Committee recommended that a Carbon Footprint be developed for the full Advisory Council.

Mr. Hayes explained that the Carbon Footprint Analysis contains a calculation of emissions based on members’ travel to and from meetings, the use of electricity for meetings of the Committee at the District facility, and air travel to and from the Air & Waste Management Annual Exhibition & Meeting. The vast majority of emissions derive from the attendance of Council members at the latter. If an offset fee were tacked on to the 12,970 pounds of carbon generated annually by the Committee, a fee of \$5.50 per tons per year of CO₂ would amount to \$35.67. Chairperson Hayes noted that the company for which he works is striving to become carbon neutral in all of its planning activities globally, and has calculated that it can do so at a total cost of approximately \$5,000. There was a lengthy discussion on the topic.

Mr. Hayes moved that, on behalf of the Planning Committee, the Advisory Council develop its Carbon Footprint to beyond carbon neutral to become consistent with the statewide greenhouse gas reduction targets, as adopted in AB 32; seconded by Dr. Holtzclaw; carried unanimously. Mr. Kurucz stated that this matter will be referred back to the Planning Committee to pursue and develop the Carbon Footprint further. Mr. Hayes requested each Council member to review the Analysis and to send their individual data back to him, via email. The Committee will then compile the data and forward it to District staff for further details and calculations to whatever level they may wish to pursue it.

- 3. Technical Committee Meeting of August 9, 2006.** Dr. Bornstein stated that the Committee received a staff update on the District’s Community Air Risk Evaluation (CARE) program. The CARE program objectives are to (1) evaluate community cancer and non-cancer health risk from ambient toxic air contaminants, and (2) focus the health risk mitigation measures on locations with higher risk levels and sensitive populations. The program is designed in three phases. Phase I concerns conducting scoping studies of the toxic emission inventory and further refinement of the inventory, along with initial mitigation measures. Phase II concerns modeling pollutant concentrations and continued development of mitigation measures. Phase III concerns exposure assessments and mitigation measures. Phase I of the CARE program is nearing completion. Among the findings and results observed to date, data has been generated for cancer toxicity-weighted emissions based on each pollutant – in which diesel particulate ranks as the foremost pollutant at 80%. Fifty percent of the chronic non-cancer risk is from acrolein.

Dr. Bornstein further stated that in a discussion phase that followed, he had inquired if it might be advisable to request a presentation from the South Coast AQMD staff on its modeling work and then have a meeting between South Coast and Bay Area staff. Dr. Bornstein has been in contact with Dr. Phil Martien, Senior Advanced Projects Advisor and CARE Program Manager who advised Dr. Bornstein that he has made the proposal to the District to invite the South Coast AQMD to make a presentation at the next Technical Committee. The speaker from South Coast AQMD will provide a summary of what was learned from their program and will be available for further discussions with the District staff.

4. Public Health Committee Meeting of September 6, 2006. Mr. Bramlett stated that the Committee was asked to consider the topic of Wood Smoke Emissions as part of its work during 2006. Staff presented an update on the wood burning behavior in the Bay Area. The Committee unanimously arrived at its recommendations for forwarding to and consideration by the full Advisory Council. It recommends that the District should continue its current efforts and immediately develop and implement a program to further reduce wood smoke emissions. This program should be a multi-pronged effort and phased in over the next few years. Characteristics of the program should include:

- A) Support the existing Wood Smoke Program through completion of the following elements:
- Continue promotion of the Model Wood Smoke Ordinance.
 - Continue to study wood smoke emissions related to Particulate Matter (PM) levels.
 - Continue monitoring of localized and community PM levels.
 - Continue the use of public outreach techniques that use languages representative of the diverse communities.
 - Expand public outreach to increase awareness of wood smoke impacts on PM levels and the harmful effects of elevated PM.
 - Expand the use of incentives to accelerate elimination of conventional stoves and reduce wood burning, particularly through forming partnerships with Pacific Gas and Electric and the Hearth, Patio & Barbecue Association for change-outs of older conventional stoves with lower-emitting models.
 - Develop and include, as part of a public outreach program, a list of fuels that should not be burned in residences. This list should include garbage, chemically treated wood products and plastics. Consider adding to the list of prohibited fuels wood products having moisture content greater than 20%.
 - Consider a wood stove crushing program
- B) Adopt a Two-Step Wood Smoke Curtailment Program to follow the District's existing voluntary curtailment of the "Spare the Air Tonight" program and include a mandatory curtailment program as the second step. Elements that should be included:
- Reduce the current threshold for Spare the Air Tonight events so that more events are called per season.
 - Consider setting the mandatory curtailment threshold at 25 micrograms per cubic meter for PM_{2.5}.
 - Create a rule to define and prohibit improper emissions from wood burning to provide enforcement officers a tool to prevent individuals (residential) creating emissions at the expense of public health.
 - Enact an opacity element applicable to residential wood burning emission to aid mandatory curtailment enforcement options.
- C) Keep the Advisory Council informed as the wood smoke program reaches significant milestones in its development and implementation.

In response to questions from Council members, Mr. Bramlett stated that:

- a) Models for enforcement of improper wood burning in residential areas could be borrowed from other jurisdictions that have fairly well developed models, particularly from the Puget Sound Clean Air Agency.
- b) In order to keep this presentation short and concise, he had not included any of the key issues and other details in his presentation. Control measures that are effective and reduce wood smoke have already been adopted by other state and regional air quality agencies, such as the Puget Sound Clean Air Agency. The District can benefit from their experience with programs such as burning curtailment, regulatory standards on opacity and enforcement, increased public outreach, and incentives and grants implementation.
- c) The rule making process related to the subject will be carried out by the District Staff and not by the Advisory Council.

Peter Hess, Deputy Air Pollution Control Officer, commended and applauded the work of the Public Health Committee on this matter and stated that the District endorses the recommendations of the Public Health Committee. He stated that the District staff was in discussions with the regulatory staff of the San Joaquin Valley Air District and Puget Sound Air Agency with regard to developing regulations for the wood smoke program. Staff will be embarking on a fully integrated wood burning device mitigation program; developing the necessary language for the regulation; writing the required socio-economic reports; preparing the CEQA documents; conducting the necessary workshops and finally presenting the rule and regulation to the District's Board of Directors for its adoption.

Mr. Hess also mentioned that the District is looking into the possibility of developing language similar to Washington State whereby for every wood burning device being sold, there will be a \$1 surcharge towards a wood burning device crushing program or buy-back program.

Chairperson Kurucz thanked the Committee for its excellent work of getting all the stakeholders together and developing a set of recommendations for the Council to consider. Mr. Kurucz was of the opinion that if the Advisory Council did not vote on the Committee's recommendations at this meeting, then there would be a lapse of another two months which would leave the District staff in doubt as to the Advisory Council's intent on this issue. If Council members had particular concerns with any aspects of the recommendations presented at today's meeting by Mr. Bramlett, these could be further discussed. At the next meeting of the Advisory Council, the members would have the full written proposal that would follow the Council's template for presenting recommendations to the Council, along with background information associated with it.

Mr. Hayes expressed his concerns over the mandatory enforcement issue. If it implies a demand on staff, he was not sure as to what resources might be available for staff to devote time to this issue, even though it is a very important element. He was of the opinion that there are different ways to address the issue of enforcement – one is to try to phase in newer lower emitting technologies to building code modifications and voluntary compliance and crushing programs, and educating the public. He reminded the Advisory Council that this issue has a very high visibility to the public. When the matter came before the Advisory Council ten years ago, there was a very intense discussion, not only

with the public but also with the Board of Directors. He recommended that the Advisory Council proceed very cautiously when making recommendations for enforcement actions against private individuals and residences.

Mr. Bramlett clarified that the mandatory enforcement program pertains to a curtailment program whereby the public would be requested not to burn on certain nights. The elements that pertain to enforcement are merely for providing the District with tools to use for enforcement, should it choose to do so.

Mr. Blonski stated that he would like to read the entire text of the proposal to understand the strategies that would be best utilized by other jurisdictions. He would like the text of the recommendations to include both chemically-treated materials and composite-based materials that should not be burned.

Ms. Weiner mentioned that the American Lung Association had worked with the District staff and discussed the issue of enforcement. There are a number of models from which to choose, and the selection and implementation of a model that works best will be left up to the staff. Also, when the Public Health Committee heard all the speakers from San Joaquin Valley and Puget Sound, the Committee discussed the historical background and other issues that were controversial. The Committee decided to recommend an Ordinance that would be strong and workable.

Mr. Dawid stated that he would like to review a written report. However, he was concerned that the Advisory Council was spending an inordinate amount of time discussing a Committee report in such detail at this meeting. He recommended that the Advisory Council accept the Committee report, as presented, at this time, and await the written report.

Mr. Hanna stated that he would like the recommendations to be provided to the Advisory Council in a written report so that the Council members could discuss them with their respective constituencies for feedback.

Chairperson Kurucz suggested that the Committee prepare a written report and present it to the Advisory Council for its review and consideration.

PRESENTATION

5. Observations of Long-Term Global Warming and of Regional Summertime Daytime Cooling in Coastal California air-basins.

Advisory Council "Colleges & Universities" category member Robert Bornstein, Ph.D., presented data regarding trends in global warming in light of observations made concerning regional patterns of annual-averaged daily minimum and maximum temperatures.

Dr. Bornstein introduced his presentation that had been prepared in conjunction with his students, B. Lebassi and Drs. J.E. Gonzalez, D. Fabris, E. Maurer, from Santa Clara University and Norm Miller of Berkeley National Laboratory.

Dr. Bornstein stated that the global models show past and future warming and that the minimum temperatures at night will increase faster than the maximum temperatures. On the global scale, these models are run on very coarse resolutions (one to two and a half degree latitude and longitude) and they show projected reduced warming towards the coast. The global scale observations match the model results and they show accelerated warming since the 1970s; however, according to Dr. Bornstein's research, none of the results have addressed the right questions to indicate signs of cooling, even though cooling is present. Observed analyses have also shown that there is sea surface warming but warming at a lower rate than over land. This is important in terms of sea breeze forcing.

Dr. Bornstein and his group's hypothesis is that the inland warming that is happening at a rapid rate is increasing the horizontal temperature gradients between the inland areas and the coast because the ocean is warming at a slower rate. This increases the sea breeze in intensity, frequency, inland penetration and duration. Therefore, it is possible that coastal regions could be experiencing cooling temperatures during summer daytime periods. They obtained data from the National Climate Data Center (NCDC), the official storehouse of observations, for maximum and minimum temperatures from 300 California sites for the years 1948-2005. Data was also obtained from other sources, e.g. satellite and ship observations and mean monthly gridded sea surface temperature trends, and at Santa Clara University they worked with downscaled regional climate change modeling results for California for the 21st Century.

The analyses showed that the most accelerated warming has been since the 1970s. Only data from 1970 to 2005 were thus used in the calculation of annual and summertime warming/cooling trends, at $^{\circ}\text{C}/\text{decade}$ for sea surface temperatures, T_{max} and T_{min} in California. Summertime land-sea temperature-gradient (as a surrogate for pressure-gradients) trends was estimated by use of summertime mean monthly sea surface temperatures and 2-meter inland T_{max} values.

Dr. Bornstein explained that the sea surface temperature off the California Coast shows warming rates of $0.84\text{-}1.26^{\circ}\text{C}$ for the period 1970-2005 (from the NCDC data). The downscaled regional climate change modeling results for California on the 10 km resolution for the 21st Century show annual warming rates of $1.6\text{-}2.5^{\circ}\text{C}$. The coastal water area will thus be warming at a lesser rate than the inland areas.

The new results, which are preliminary, show long-term temperature trends for all of California with minimum temperatures rising most rapidly at $0.27^{\circ}\text{C}/\text{decade}$, sea surface temperatures at about $0.24^{\circ}\text{C}/\text{decade}$, and maximum temperatures at about one quarter of that. The sea breeze forcing (gradient) is increasing by about $0.10^{\circ}\text{C}/100\text{km}/\text{decade}$.

In summary, the minimum and maximum temperatures in California have been warming faster than the maximum temperatures for the entire State. However, summertime, daytime maximum temperatures are cooling in low elevation coastal air basins. In Central California, the following areas are cooling: Marine Lowlands, Monterey, Santa Clara Valley, Livermore Valley and the Western half of Sacramento Valley.

The good implications of these observations of regional summertime daytime cooling in coastal California air basins are:

- Napa wine areas may not go extinct.
- Agricultural areas may not shrink.
- Energy needs for cooling may not increase as rapidly as the population.
- There will be lower heat stress rates.
- Past and projected San Francisco Bay Area Ozone decreases may be in part due to daytime maximum temperature cooling trends and not only to emission reductions.

AIR DISTRICT OVERVIEW

- 6. Report of the Executive Officer/APCO.** On behalf of Mr. Broadbent, Mr. Peter Hess, Deputy Air Control Officer, stated that the District called a Spare the Air day on September 12, 2006. Mr. Hess summarized the exceedances for the national and state ozone standards that occurred in the Bay Area region for the summer. This year the exceedances have impacted the District's attainment status, and if there are as many ozone exceedances next year, the District will be challenged to retain its attainment of the Federal Ozone Standard.

In response to questions regarding the Spare the Air program for 2007, Jean Roggenkamp, Deputy Air Control Officer, mentioned that the District is reviewing the needs for next year and will be conferring with the Metropolitan Transportation Commission (MTC) and the transit operators. The District would also be very interested in working with the Advisory Council to obtain its input for the 2007 program. Ms. Drennen inquired if the Planning Committee would be interested in working on the 2007 Spare the Air Day program with the District. Mr. Hayes, Chairperson of the Planning Committee, agreed to this idea.

Ms. Roggenkamp stated that MTC had taken the responsibility for working with the transit operators for estimating the changes in transit riderships. They used multiple methods for calculating the estimates in increased riderships. The District hires a firm each year to conduct the telephone surveys on the nights of Spare the Air days. The District has developed a protocol of questions, endorsed by the Air Resources Board (ARB), that tries to address behavioral pattern changes as a result of the Spare the Air days. This year the results indicated that 10% of the public changed their behavior in terms of trip-making, and about three percent changed their behavior for other kinds of activities such as not using certain consumer products and not mowing lawns.

OTHER BUSINESS

- 7. Report of the Advisory Council Chair.** Chairperson Kurucz reported that he had attended the Board of Directors' Executive Committee meeting earlier today. The Executive Committee had commended the Advisory Council for its detailed minutes of meetings, and also mentioned that it was interested in obtaining input from the Advisory Council on Particulate Matter.
- 8. Council Member Comments/Other Business.**
- Mr. Dawid stated that AB 1870 (Lieber) is a bill that is co-sponsored by the Air District, California Council on Environment & Economic Balance and the Sierra

Club. The bill eliminates a loophole for a smoking vehicle that can actually pass the smog check test. The bill has been enrolled and it is unknown if the Governor will sign it because of some objections from the Consumer Affairs. The alert regarding the bill is posted on the Sierra Club's website.

- Mr. Altshuler recommended that the Advisory Council invite Mr. Bart Ostro to present his study that was presented at the 99th Air & Waste Management Association Conference in New Orleans to either one of the Committees or to the full Council.
- Dr. Bornstein inquired about the openings on the Advisory Council and the schedule for appointing new members. Mr. Hess stated that there will be about nine or ten openings on the Council, one of which will be for Mr. Hayes who will be completing his term on the Advisory Council. The interview process will start close to the end of the year when the Personnel Committee will interview the candidates and make recommendations to the Board of Directors for appointments.

9. Time and Place of Next Meeting. 10:00 a.m., Wednesday, November 8, 2006, 939 Ellis Street, San Francisco, CA 94109.

10. Adjournment. The meeting was adjourned at 12:38 p.m.

Neel Advani
Deputy Clerk of the Boards

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

APPROVED MINUTES

Advisory Council Public Health Committee Meeting
10:00 a.m., Tuesday, October 10, 2006

- 1. Call to Order – Roll Call.** Chairperson Bramlett called the meeting to order at 10:07 a.m. Present: Jeffrey Bramlett, Chairperson, Cassandra Adams (10:10 a.m.), Steven Kmucha, M.D., Karen Licavoli-Farnkopf, MPH, Brian Zamora. Absent: Janice Kim, M.D., Linda Weiner.
- 2. Public Comment Period.** There were no public comments.
- 3. Approval of Minutes of September 6, 2006.** Ms. Licavoli-Farnkopf moved approval of the minutes; seconded by Mr. Zamora; carried unanimously.
- 4. Discussion of Draft Recommendations Regarding Wood Smoke Emissions:** *The Committee discussed the draft recommendations regarding Wood Smoke Emissions.*

Councilmember Cassandra Adams arrived at 10:10 a.m.

Chairperson Bramlett opened the discussion on the draft recommendations for the improvement of wood smoke emissions. Mr. Zamora stated that the final recommendation should be addressed to the full Advisory Council and that the subject line on the memo should read: Wood Burning Control Strategies.

Committee Action: Dr. Kmucha moved to approve the draft recommendations with the changes suggested by Mr. Zamora; seconded by Mr. Zamora.

Mr. Zamora indicated that this recommendation would be presented to the full Council at its November 8, 2006 meeting.

Chairperson Bramlett stated that he received an e-mail from Linda Weiner indicating she would like to see a recent citation included in the recommendations. The article was by Michael Jerrett, et al, November 2006 on the “Spatial Analysis of Air Pollution and Mortality in Los Angeles” from the *Journal of Epidemiology*. The article focuses on the results of chronic health effects associated within city exposures and that they may be even larger than previously reported.

Mr. Zamora stated that the recommendation before the Committee discussed the health issue at length and that adding more does not change the fact that this is a health issue. The citation could be added under “Information Considered.”

Ms. Licavoli-Farnkopf stated that PM exposure is more dangerous than originally thought, but it may not be necessary to include the information on this study to make the point. It would not change anything that is already in the recommendation. Dr. Kmucha expressed concern that this citation discusses a more general issue and that the recommendation from the Committee is on the wood smoke issue. It might be an article that the Committee would focus on at a future meeting.

Peter Hess, Deputy APCO, stated that there are many studies showing the same thing and if necessary, could be provided. Because of these health affects the PM standard was strengthened from 65 to a more stringent level. The Committee has established that wood burning creates particulates.

The motion then passed unanimously.

5. Summary of Recent Presentations Regarding Indoor Air Quality and Asthma: *The Committee discussed recent presentations regarding indoor air quality and asthma and determined what the next steps should be.*

Chairperson Bramlett reviewed the presentations on indoor air quality (IAQ) and asthma as follows:

- July 12th – Presentation at full Council meeting by Dr. Sawyer on certain aspects regarding diesel and heavy-duty diesel. Relevant to IAQ and asthma are the health affects associated with PM 2.5. Dr. Sawyer also discussed land use and planning and proximity of residential areas to freeways as being an important element.
- August 9th – An update on the Community Air Risk Evaluation (CARE) Program was given by Dr. Phil Martien. The objectives of the CARE Program are: 1) to evaluate community cancer and non-cancer health risk from ambient toxic air contaminants. 2) focus health risk mitigation measures on locations with higher risk levels in sensitive populations. Wood smoke and particulate matters were key elements in this presentation.
- May 10th – Presentation to the full Council by Cindy Tuck of the Environmental Protection Agency (EPA) on California goods movement and that action plan.
- May 10th – Presentation to Public Health Committee from John Crouch from the Hearth, Patio and Barbecue Association.
- In the original request to the Council, asthma and IAQ were number five. Last year the Advisory Council recommended that the District proceed with an IAQ program and made recommendations for the next steps. Numerous reports link asthma with poor indoor air quality. The Executive Officer/APCO requested that the Advisory Council review and suggest options where the District could best interface with county and city health officers relative to indoor air quality and asthma.

Chairperson Bramlett stated that providing the link between the District and county health officers will assist in determining how the organizations can assist each other. Ms. Adams inquired if the county health officers know what is it in indoor air that causes asthma or exacerbates it? Dr. Kmucha responded that there is a lot of literature available on changes in indoor air quality. There is good evidence that shows indoor air quality can be hundreds of times worse than outdoor air quality and that it might be seasonal in areas where there are more

seasonal changes than in the Bay Area. In the mid-west, indoor air quality is much worse in the winter than it is in the summer. In the Bay Area there is not much change throughout the course of the year. IAQ depends a lot on the type of cooking stove used, heating units used, how many people are in the home, pets, plants, and air flow, to name a few.

There is also data that suggests that there is certain regionalization of problems such as in the areas of Richmond or West Oakland. These areas might have an outdoor problem that contributes to the indoor air. There has been an increase over the last 20 years of incidents of asthma in the community and many organizations are focusing on this with regard to the health care aspect. Dealing with the public health officers is one aspect, but there are also some regional organizations that already serve as umbrellas across counties across the Bay Area. They too need to be brought in as well. San Mateo County has an asthma committee, Santa Clara County has one, the Kaiser system has its own asthma council.

Ms. Adams stated that, as an architect, there are also building code requirements that allow gas stoves and toxic construction materials to be used in homes. In addition, there is the issue of air tightness of buildings, which leads to the issue of the ventilation systems. Another issue that comes up is requiring landlords to change filters every so often in the ventilation and heating systems.

Ms. Licavoli-Farnkopf stated that there are some jurisdictional issues involved. One jurisdictional issue is dealing with the air quality in the school system. There are also a lot of problems in low-income housing due to poor maintenance, molds, and other sanitary issues that lead to poor air quality. The District could start with the health officers and then go to hospitals, school districts, school boards, and housing authorities.

Chairperson Bramlett then reviewed and summarized last year's request. Two years ago the request came from staff because a lot of calls on indoor air quality were being received. The question was should the District take a lead role in IAQ, or be a broker of existing information, or some other consideration.

The 2005 recommendations built on some of the recommendations from 2004. The 2004 recommendations included having a regional workshop on indoor air quality and that the District convenes or initiates a series of workshops to get the interested parties and players together to work out how to coordinate this effort. At that same time, Dr. Michael Lipset gave a presentation on IAQ to the Committee.

The Committee also suggested that a graduate student in this area could look at the issue more in-depth. There was also discussion on the coordination that would need to happen between the District, the Air Resources Board, the Department of Health Services, and any of the other working groups that were recommended at that time.

In 2005, the 2004 recommendations were reaffirmed, and additional recommendations were made to the District that they develop general information, build on the existing information, and focus on facilitating inquiries be directed to existing agencies with IAQ programs. It was suggested that the District develop educational materials based on research for various target audiences, such as "Tools for Schools." There was also a recommendation for more hands-on educational and teaching information. Finally, conduct additional research to develop an ability to refer questions received at the District to the proper person in other organizations/agencies. It

was noted that the District is working on some of these things and as a result is looking for better ways to link up with the city and county health officers.

Dr. Kmucha recommended summarizing the discussion in a letter and sending it to the appropriate agencies in the region.

Ms. Adams inquired as to the authority given to health department and their ability take enforcement action if there is a problem. Which, of all the different groups the Committee is discussing, would have the authority to implement and require changes to be made? How would the District interface with them and what the process would be to give them the tools to require changes to be made?

Ms. Licavoli-Farnkopf stated that whatever the Committee recommends, education and educational materials does not always lead to change. Printed materials may not get the agencies to develop and enforce a policy to mitigate the problems in the community. Ms. Licavoli-Farnkopf stated that the Committee needs to do something meaningful that will have an impact on IAQ and asthma in the Bay Area.

Peter Hess, Deputy APCO, stated that staff is looking at what type of coordination is needed, or how staff should be moving towards interfacing with the health community in the various areas. Items that staff is pursuing now include: 1) revising the air quality elements in general plans, 2) progress is being made on the diesel mitigation program, especially in the areas where hot spots have been identified, 3) looking at the hot spots to concentrate resources to change over the diesel emissions or put on diesel control equipment and should the District be working with the health officers in that area, 4) working on diesel and air quality mitigation programs outdoors where the District has jurisdiction. The resulting question is would the District's programs be more effective if the District worked with a larger community on these issues.

Ms. Adams stated that when talking about the hot spots and certain places where air quality is worse, the District should be working with zoning and planning commissions. Those are the agencies that set and say what gets built in what place. To have them change, for example, their zoning maps, so that housing does not get built in these hot spots, would be more affective than talking with the health officers.

Mr. Zamora stated that Dr. Kmucha's idea of sending a letter to the health officers is a start. If Dr. Kmucha would write the letter, Mr. Zamora could make sure it was addressed to the appropriate health officers. The health officers have information they can channel to the Air District. Mr. Zamora noted that the authority and the power of the local health officers is huge. If the health officers and District staff work together, it could define the agenda and move it forward.

Dr. Kmucha indicated he would draft the letter and commented that there is a disconnect between the public health department and the medical community. It is clear that these two groups of health care professionals could increase their work together to have a greater influence on this issue. Physicians may not have a lot of time to spend on the public health side.

The public health community is working on community issues and a lot of that information does not seem to filter down to the individual physicians seeing individual patients. Every county medical association in the Bay Area has a physician committee on environmental and public

health. Those Committees vary in their effectiveness, their activity level, and frequency of meetings from county to county. This would be another way to pull in the direct medical community. Because Kaiser has a large number of the physicians practicing in the Bay Area, there is a high amount of Kaiser representation that exists within the independent medical associations.

The issues of construction, planning, and zoning is expected to be a difficult problem because from, a business perspective, the cheapest property is close to the freeway. The Bay Area needs housing and it is going to be built close to transportation because that is the motivation. The issue is working with Planning Commissions.

Ms. Licavoli-Farnkopf added that what would be helpful to define what the Committee means when discussing IAQ. Is it when the outdoor and indoor intersect? Or, does it include molds and mildews in houses, or poor indoor air quality in schools because of bad ventilation, and other similar issues. If the Committee is talking about housing developments near freeways, or current development near freeways or ports; that is where one area of discussions with health officers comes into play. The Air District cannot do it alone; it is a larger community issue. It is a regulatory issue at the federal level if one talks about housing and similar things like that, or at the state level if one talks about needing more money for improving the schools. The District is getting calls about this and it needs to respond in ways that help people. If the Committee is clear that IAQ is when the outdoor and indoor air quality intersects, then that is clearly the domain of the Air District. A place to start to address the issue would be contacting the health officers.

Ms. Adams agreed that there are two different issues, but understands some of the questions the District receives have to do with indoor air quality issues like mold or other indoor generated pollutants. The Committee may want to narrow the focus at first to deal with specific issues.

Chairperson Bramlett stated that the prior 2004 and 2005 recommendations discussed referrals to other agencies that are able to answer questions. He suggested that at this point, the Committee can contribute to this question by focusing on the connection or link between outdoor contributions to indoor problems. This may give the Committee and those asked to speak or give presentations adequate focus.

Chairperson Bramlett stated that the next step would be for Dr. Kmucha to draft the letter to engage the city and county health officers.

Committee Action: Draft a letter to the city and county health officers.

7. **Committee Member Comments/Other Business.** There were none.
8. **Time and Place of Next Meeting.** 10:00 a.m., Tuesday, December 12, 2006, 939 Ellis Street, San Francisco, CA 94109. Chairperson Bramlett requested Dr. Kim be contacted to confirm her attendance at the next meeting; an alternate date would be December 21, 2006 if Dr. Kim is unable to attend the meeting on December 12th.

9. Adjournment. The meeting adjourned at 10:57 a.m.

Mary Romaidis
Clerk of the Boards

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

DRAFT MINUTES

Air Quality Planning Committee
9:30 a.m., Wednesday, October 11, 2006

1. **Call to Order – Roll Call.** Chairperson Stan Hayes called the meeting to order at 9:49 a.m. Present: Stan R. Hayes, Chairperson, Ken Blonski, Harold Brazil, Emily Drennen, John Holtzclaw, Ph.D., Kraig Kurucz, Ed Proctor. Absent: Fred Glueck.
2. **Public Comment Period.** There were no public comments.
3. **Approval of August 9, 2006 Minutes.** Mr. Proctor moved approval of the minutes; seconded by Dr. Holtzclaw; carried unanimously.
4. **Discussion of California’s New AB 32 Greenhouse Gas Legislation:** *The Committee heard a presentation regarding AB 32 and its requirements and implementation schedule. The Committee discussed the possible implications of AB 32’s passage for the Air District’s Climate Protection Program and future Committee and full Advisory Council actions.*

Chairperson Hayes stated that there are two pieces to the climate change agenda before the Committee. 1) AB 32 which California has passed and the Governor signed approximately two weeks ago. This is landmark legislation with respect to climate regulation in California. 2) The second portion of the agenda deals with the implementation of the Carbon Footprint resolution passed at the last full Advisory Council meeting.

Chairperson Hayes stated that AB 32 mandates that California’s greenhouse gas (GHG) emissions be reduced to 1990 level by 2020. There are six different types of GHG emissions, carbon dioxide being the most abundant, and each of them has a different global warming potential. By January 1, 2008, the California Air Resources Board (CARB) must determine California’s 1990 emission level. CARB will then go through a process to implement regulations to reduce emissions to 1990 levels by 2020.

In response to a question from Mr. Blonski, Chairperson Hayes stated that the Kyoto Protocol set 1990 as the base year. The climate scientists have estimated that in order to abate the rate of increase in carbon dioxide, and reduce it to a level where they would like it to be, would take a much greater degree of reduction. It would only be achievable in the far future, such as 2050.

Continuing with the presentation, Chairperson Hayes stated that the legislature’s intent is that GHG emissions are to be reduced beyond 2020 and go beyond the 1990 levels. CARB is required to come back to the Governor and the legislature on ways to accomplish this.

Mr. Blonski inquired if the projected growth of the State was taken into account and Chairperson Hayes indicated that it was not. He added that there has been no formal estimation of the 1990 emissions. This is something that needs to be determined and CARB's job is to determine the 1990 levels.

Chairperson Hayes reviewed the sources of GHG emissions in 2002 and stated that transportation, at over 40%, is the largest emitting sector in the State. Dr. Holtzclaw stated that nation-wide transportation is a little over 20% for trucks and cars. California gets some of its electricity from out-of-state and has a mild climate. Industry tends to be high-tech, which uses electricity, but not as much as other industries. Also, agriculture and forestry, which are major businesses in California, is only at 8%.

Chairperson Hayes stated that the common theme is that anything that burns fuel creates CO₂. About 85%, or more, of greenhouse gases are CO₂ and the bulk of that comes from burning, such as burning fuel in your car. The pie chart shown reflects the mix of California businesses and driving habits. Dr. Holtzclaw commented that the per capita driving is less than the national average and there are a lot of Western states, as opposed to Pacific states, whose population drives a lot. Chairperson Hayes added that electric power often shows up as a higher fraction than 20% so the 19.6% on the chart is low compared to the national figures. It may be the type of fuel used, such as more natural gas being used in California than coal. There is also hydro power and California is also buying power from other states. The important fact is that cars are a major contributor to GHG emissions. The chart also shows where regulators would look if regulations were promulgated to reduce GHG emissions in California. It is clear that transportation needs to be addressed, as well as electrical power and industrial use.

From 1990 to 2005, emissions from the residential and commercial sectors remained about the same during that time frame. The industrial category dropped from 1990 to 2005 by approximately an amount that was greater than what would have been required under the Kyoto Protocol. Mr. Hess stated that this is due to the California Energy Commission standards on efficiency, such as efficiency on home water heaters, double-paned windows, and similar types of things. This is also taking place in the industrial sector, the Air District's rules which limit the amount of NO_x that can be emitted, forces industry to be more efficient in their operations. More is being done with the same amount of "energy" which translates to less pollution, whether it be CO₂ or the criteria pollutants.

Mr. Blonski inquired about outsourcing or sending overseas heavy manufacturing and to what degree would that affect emissions. There is a lot of heavy industry that is leaving the state and being replaced by other types of industry, which have fewer emissions. Mr. Hess noted that energy efficiency trends started about 20 years ago throughout industry and in homes. Fuel efficiency is critical right now in the transportation sector; it could have a significant cut in the CO₂ and criteria pollutant emissions. Most of the power generation in California, compared to 25 to 30 years ago, is combined cycle where the energy is used more than once to generate electricity. This is not seen in other locations.

Chairperson Hayes continued with the presentation and reviewed trends of GHG emissions normalized to 1990 in California versus the rest of the United States. The chart indicates that the trend did not go above the 1990 level until approximately 1998. Chairperson Hayes reviewed the graph showing carbon intensity in California versus other states. Carbon

intensity is defined as emissions per capita (per person emissions). The graph shows that the emissions per person in several states were comparable to or lower than the United States overall. The horizontal line on the graph indicates the emissions per dollar of gross state product (GSP). The graph shows that California has low emissions per dollar of economic activity.

Dr. Holtzclaw stated that many of the states listed have economies that have not risen as rapidly as California's and that they have more energy intensive industries. In response to Mr. Blonski, Chairperson Hayes explained that Texas is high because there is a lot of industry in Texas and there are high emissions relative to the number of people because Texas is lightly populated outside of the major cities. Mr. Hess added that Texas has a law that requires that all of the electricity must be generated within the state. Chairperson Hayes reviewed the CO₂ emissions from fossil fuel combustion and noted that California is second only to Texas in this area.

Mandatory GHG Emissions Reporting: The requirements of AB 32 were discussed. Chairperson Hayes stated that there is a portion of the bill that deals with mandatory GHG emission reporting, regulations that require reporting and verification, and sets out the rules of how it is to be done. CARB is to adopt these regulations by January 1, 2008. The law requires that ARB review existing programs, international, federal, and state GHG reporting programs. ARB is to make reasonable efforts to promote consistency and streamline reporting requirements.

Chairperson Hayes reviewed more specifics of the ARB regulations, which require monitoring and annual reporting of GHG emissions, accounting for GHG emissions from all electricity consumed in California, incorporating the standards and protocols developed by the California Climate Action Registry, and ensuring rigorous and consistent GHG emissions accounting, and provide reporting tools and formats to ensure collection of necessary data. In response to a question from Mr. Kurucz, Chairperson Hayes stated that there are certain sectors that will be looked at first. Petroleum refining, power generation and cement kilns are a few of the primary industries. Others include the transportation sector and landfills.

Rules and Regulations: Continuing, Chairperson Hayes reviewed AB 32's rules and regulations. He stated that the ARB must adopt rules and regulations that "achieve the maximum technologically feasible and cost-effective" GHG reductions. Early action measures require that by June 30, 2007, the ARB must publish a list of discrete early action GHG reduction measures and limits. By January 1, 2010, ARB must adopt the regulations to implement the early action measures on that list and must achieve maximum technologically feasible and cost-effective GHG reductions. In addition, by January 1, 2010, the adopted early action measures must be enforceable.

Chairperson Hayes indicated that a lot of work has already been done by the Climate Action Team. California has already put together a Plan for how the state would achieve its emission reductions. Items in this Plan may also be included in the ARB regulations. Mr. Hess gave an example of landfill gas that is used to make electricity instead of being flared into the atmosphere.

There is also a requirement to have a Scoping Plan by January 1, 2009. ARB has to prepare and approve a scoping plan to determine how the state will achieve the 1990 emission level

by 2020. The Plan has to be updated every five years. There are many things the ARB must consider when developing the Plan. Some items to consider include alternative compliance measures, market-based compliance mechanisms, should there be monetary and/or non-monetary incentives, consideration of voluntary measures, consider all relevant information, evaluation of potential costs and benefits of the Plan.

Based on the Scoping Plan, emission reduction measures will be identified and adopted by ARB. By January 1, 2011, ARB must adopt GHG emission limits and reduction measures sufficient to achieve “maximum technologically feasible and cost effective” reductions in GHG emissions. These limits will take effect on January 1, 2012.

When these measures are developed, ARB must consider many factors, including equity, cost, and interactions with efforts to improve air quality. Chairperson Hayes noted that the measures are adopted piecemeal, but there is a broader overall objective – improve air quality. Continuing, Chairperson Hayes stated that the reductions must be real, permanent, quantifiable, verifiable, and enforceable. The reductions must also be additional to GHG emission reductions that otherwise occur, and the emission reductions must occur over the same time period. ARB must also rely on best available science and economic information. The regulations may be revised after January 1, 2011.

Market-Based Compliance Mechanisms: Chairperson Hayes stated that AB 32 discusses market-based compliance mechanisms and that they may be used. Several factors need to be considered before it can be done. The other component is that ARB must adopt methodologies for quantifying voluntary GHG reductions, and to verify and enforce those voluntary reductions.

Key Dates:

- 2007 – June 30th – List of early action measures
- 2008 – January 1st – 1990 GHG emission level reporting and verification regulations
- 2009 – January 1st – Scoping plan for achieving 2020 limit
- 2010 – January 1st – Early action regulations
- 2011 – January 1st – Emission reduction measures
- 2012 – January 1st – Reduction measures operative

Some BAAQMD Issues: Chairperson Hayes indicated he tried to single out some places where the expertise or the interests at the District would cross over with AB 32 requirements:

- Methodologies for quantifying GHG emissions and reductions. The Air District has very well developed and sophisticated program for estimating criteria pollutant emissions and air toxics for stationary sources. This is an important role for the Air District.
- Definition of “maximum technologically feasible and cost effective” GHG reduction measures. The Air District has imposed Best Available Control Technology (BACT) programs in addition to other technology driven requirements.
- Interactions of GHG reduction measure with efforts to improve air quality. GHG emission reductions may do something to ozone, particulates, CO and air toxics. There are cross-effects that will take place. An example is that trucks emit carbon, which is black and absorbs. As is absorbs, it has a net warming affect on the atmosphere. On the other hand, other particles, particularly those that are formed

photo-chemically, in the air from VOC's and NO_x as part of the photo-chemical process, are reflective. This would tend to cool the atmosphere. There is a need to understand how the trade-offs work.

- Design of market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria pollutants. It specifically states in the law that the ARB has to consider the effect of market-based compliance mechanisms on emissions of air toxics and criteria pollutants.

Chairperson Hayes stated that this shows that there are some places where the Air District has an important role to play in the process. Mr. Hess stated that it is important to note that in the upcoming legislative session there will be additional legislation for clarification of the implementation of AB 32.

Tom Addison, Senior Advanced Project Advisor, stated that there is a lot of interest in this bill by the soon-to-be regulated community on exactly what the bill means. The bill has been signed and it is a big program. In response to a question from Mr. Kurucz, Mr. Addison stated that all of the language in the bill was subject to much discussion. The "maximum technologically feasible and cost effective" language was the subject of much discussion. This language in this bill is seen as being a "win" for the environmental community. Chairperson Hayes provided copies of the bill to the Committee members.

In response to Mr. Blonski, Mr. Addison stated that within the environmental community there was divergent perspectives and views on several issues, such as market-based trading. Some groups were opposing the entire bill based on the fact that it had mandatory trading in it. In response to Ms. Drennen's question on the schedule, Mr. Addison indicated that the schedule is very ambitious.

Dr. Holtzclaw discussed smart growth/transit oriented development that reduces the amount of driving and, if encouraged by the state and the ARB, could become more wide-spread. Reducing the amount of driving, reducing heating and cooling energy because walls, ceilings, and floors are shared. There are then less exposed surfaces to the elements, which in turn, reduces building materials, etc. Mr. Addison responded that nothing in this bill removes any local land use authorities or decision-making abilities.

Mr. Hess stated that it is important to compare this piece of legislation to the Kyoto Protocol. There are major differences between the two. Kyoto is focused on countries and also has major exemptions. AB 32 focuses on industry. AB 32 could be the frame-work for an international accord for reducing GHG emissions world-wide. What needs to be looked at is ways to accomplish emission reductions in a cost-effective manner and fair manner world-wide. This piece of legislation should be watched throughout the world. Other states are moving forward on GHG emission programs.

In response to questions from Ms. Drennen on the Air District's role with respect to AB 32, Mr. Addison stated that the Air District had a "support and seek amendments" position on AB 32. There is a piece of the bill that states "nothing in this bill takes away any existing powers that anyone has." This statement in the bill is very important to the Air District. The Air District currently regulates stationary sources and there is an inventory of emissions from these sources. Their GHG emissions are tied to their permit conditions, which specify the

amount of fuel they are consuming, the amount of use, and hours of operation. Air District inspectors are in the field now looking at the sources. In order to have AB 32 work, the base-line needs to be accurate. In addition, there is a need to make sure the regulations are being complied with by the regulated industry. The Air District's role has yet to be determined. The issue is being discussed and it is anticipated that the air districts will play a significant role in this process.

Mr. Hess stated that one of the things that would be beneficial would be a Clean Air Act Science Advisory Committee (CAASAC)-type of procedure. Mr. Hayes noted that there are several advisory groups that are called out in the bill.

Mr. Kurucz inquired about comparisons between this bill and the Kyoto Protocol. With Kyoto, each country would set up market-based mechanisms that would allow trading throughout their whole country to make their targets as a nation. If there was a trading program with AB 32, would it be state-wide, or would it be more like the district-type programs because they already exist. Would it include trades that would be outside of the boarders because there are companies that are outside or power that is imported. Someone could make a huge energy savings, but the actual reduction would occur at a power plant in another state. Mr. Addison stated that this will be determined later.

In conclusion, Chairperson Hayes stated that this is one of the most important pieces of environmental legislation that has come forward in California. It is an issue that has world-wide implications.

5. Implementation of Advisory Council Motion on Climate Change. *The Committee discussed initiation of planning efforts to implement the Advisory Council's climate change motion adopted at its September meeting. The motion established as a Council goal the reduction of its carbon footprint beyond carbon neutral to achieve AB 32's greenhouse gas reduction targets.*

Chairperson Hayes presented an update of the Carbon Footprint Analysis for the year 2006 for the full Advisory Council. Chairperson Hayes noted that some of the entries on the Analysis are placeholders for the present time. Accurate data will be inserted once the individual Council members submit the appropriate information. Chairperson Hayes noted that air travel to the Air & Waste Management Association conference in New Orleans is the largest amount of the Council's Carbon Footprint. Chairperson Hayes stated that attendance at the conference is important and that even though it is the largest segment of the Carbon Footprint, Council members should still attend the conference. If the resolution is to be implemented, the Council will need to find a way to offset the air travel more than one for one. The Council would need to go to something that is reflective of the percentage of reduction that is necessary to get to the 2020 targets of AB 32. The offset would then be a 1.2 or 1.25 to one basis. The cost of offsetting the 9 tons would cost about \$49.09 to fully offset at the going rate of \$5.50 per ton. That number will go up, but the cost to the Council would still be de minimis.

The Committee discussed identifying organizations which could bundle contributions of money from organizations for the purpose of funding projects to reduce carbon emissions. There was discussion on sending the money to non-profit organizations or sending the money to an organization that already exists that can do something that can have an affect in this

year. This would result in an immediate impact, rather than giving the money to an organization that may do something in the future.

Dr. Holtzclaw stated that aggregating lots of different organizations' money together could be more effective. Mr. Blonski inquired about looking at the equity market and buying shares and these shares would be traded. Chairperson Hayes responded that there are carbon markets, like the Climate Exchange in Chicago that could be contacted and added that there are organizations that will put the money in a "pool" and that could be researched by the Committee. Mr. Hess stated that the Executive Committee of AWMA discussed the issue of having a booth or a place where people can come in, calculate their carbon footprint for the meeting, fill in a card with their name, and put their card and money in a visible spot.

Henry Hilken, Director of Planning, Rules & Research, stated that there are many organizations that do this. There is more interest these days with more individuals and companies attempting to become carbon neutral. In Al Gore's movie he is traveling thousands of miles each year, but he contributes money to one of these organizations to make his carbon footprint neutral. The Air District's Climate Summit being held next month will be a carbon neutral event. A firm has not been selected as yet, but the District will calculate the carbon emissions and pay one of these organizations to off-set the emissions. The key is to see how the money is being used by the organization and will it be long-term emission reductions investments, such as energy efficiency or renewables, as opposed to something that may have a shorter-term benefit.

Chairperson Hayes discussed what it is the Committee needs to do to implement the resolution. The carbon footprint is a start. The Committee may want to get a presentation or further input from staff as to what their experience was been with the Summit. The question is how can the Council go carbon neutral and to look into long-term versus short-term benefits. In addition to the initial step of the carbon footprint and trying to be carbon neutral, the Committee should develop a plan. The plan would include information on where the Council is now, what the options are, and steps to take to get there.

There was discussion on different modes of transportation to the annual AWMA conferences, the equity issue, lifestyle changes, smart growth, collection of the money, and organizations to contact to offset the emissions.

Chairperson Hayes stated that the Carbon Footprint would be sent to the Council members so the information can be updated by the next Regular Council meeting. If the Council wants to go beyond carbon neutral, what are the options to do this. Staff could present information from the Summit and what was done to make that event carbon neutral. A baseline would be established this year from the Carbon Footprint and, in future years, the Council could see how the Plan is working. A report could be given at the Retreat.

Mr. Kurucz stated that each of the Committee members could conduct some research on organizations that the money could be sent to. The Committee could narrow it down to a couple of local organizations and invite them to speak before the Committee on how the emission reductions are provided. Dr. Holtzclaw recommended that the Council put in double the amount. Mr. Kurucz stated that one group that could be contacted is the C3, which is part of the Bay Area Council. They have developed some principles and the Committee could get a speaker from them who could discuss the principles and what their

thinking is on offsets. Mr. Hilken noted that the Silicon Valley Leadership Group has also been very active and they could also be invited.

Mr. Kurucz indicated he would look into getting a speaker from one of these organizations for a presentation at the November meeting if possible.

6. **Committee Member Comments/Other Business.** There were none.
7. **Time and Place of Next Meeting.** 9:30 a.m., Wednesday, December 13, 2006, 939 Ellis Street, San Francisco, CA 94109.
8. **Adjournment.** 11:51 a.m.

Mary Romaidis
Clerk of the Boards

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

DRAFT MINUTES

Advisory Council Regular Meeting
10:00 a.m., Wednesday, November 8, 2006

CALL TO ORDER

Opening Comments: Chairperson Kurucz called the meeting to order at 10:00 a.m.

Roll Call: Present: Kraig Kurucz, Chair, Cassandra Adams, Sam Altshuler, P.E., Louise Bedsworth, Ph.D., Ken Blonski, Robert Bornstein, Ph.D., Jeffrey Bramlett, Harold Brazil (10:20 a.m.), Irvin Dawid, Fred Glueck, William Hanna, Stan Hayes, John Holtzclaw, Ph.D., Janice Kim, M.D.,(10:10 A.M.), Steven Kmucha, M.D., Karen Licavoli-Farnkopf, MPA, Ed Proctor, Linda Weiner, Brian Zamora.

Absent: Emily Drennen.

PUBLIC COMMENT PERIOD: There were none.

Council member Kim arrived at 10:10 a.m.

PROCLAMATION/COMMENDATION

The Advisory council presented a Resolution to Stan R. Hayes for his outstanding service on the Council and his dedicated service to the cause of air pollution control.

Chairperson Kurucz recognized Mr. Hayes for being an excellent role model for Council members and thanked him for his service. Mr. Hayes thanked the Advisory Council for its support and expressed his gratitude for having been part of it for 12 years; he applauded the Council for its dedication to the District and to the goal for achieving clean air.

Council member Brazil arrived at 10:20 a.m.

CONSENT CALENDAR:

- 1. Approval of Minutes of September 13, 2006.** Mr. Altshuler requested that on Page No. 8, bulleted item No. 2, “Astrow” be changed to “Ostro”; and under Item No. 10, “Adjournment”, time of adjournment should be changed from 12:31 a.m., to 12:38 p.m.; Mr. Dawid requested that on Page No. 7, Item No. 8, under the first bulleted item, the word “Air” should be added before the word “District”, and add the words “Environment and” before the word “Economic”. Dr. Holtzclaw moved approval of the minutes, as corrected; seconded by Mr. Glueck; carried unanimously.

AIR DISTRICT OVERVIEW

2. Report of the Executive Officer/APCO. On behalf of Mr. Broadbent, Jean Roggenkamp, Deputy Air Pollution Control Officer, reported as follows:

(a) The upcoming Summit is scheduled for Friday, November 10, 2006, at the Yerba Buena Center for the Arts, San Francisco; registration starts at 8:30 a.m. Approximately 500 people are expected to attend it. Vice President Al Gore is the keynote speaker; the District's Board of Directors' Chair and Executive Officer will also be providing comments. There will be a "Solutions" spotlight that is being introduced by Mayor Gavin Newsom and people from around the region will be providing information about what their organizations are currently implementing for Climate Protection.

Locally elected officials; representatives from businesses throughout the region; non-governmental organizations, youths and foundations; and representatives from the Governor's administration will be in attendance. The Air District has specifically tried to attract a diverse group of people and organizations within the Bay Area to attend the Summit.

In response to Mr. Blonski's inquiry regarding follow-up actions to the Summit, Ms. Roggenkamp explained that one of the key components of the Summit day is a session that will involve networking groups representing local government, business, transportation, non-governmental organizations, etc. Each group will be led by a facilitator and they will discuss what is currently being done, what can be done in the future and what the next steps might be. The Summit will lead to future actions across the region. The District has its own initiatives that have been approved by the Board of Directors and staff will continue to work on those.

(b) The Spare the Air Tonight is the Air District's winter time Spare the Air (STA) program, focused on reducing Particulate Matter (PM) because in the winter time there are higher PM levels during the night. The program will start on November 20, 2006 through mid-February, 2007. There will be radio and TV coverage during the period of the program. The focus is on reducing wood burning, reduced driving, etc. It is important to note that there will not be a free transit component of the winter time program; and that the United States Environmental Protection Agency has lowered the PM_{2.5} standard from 65 micrograms/cubic meter to 35 micrograms/cubic meter. The trigger level for calling the STA Tonight will be associated with the new standard. Therefore, it is very likely that there will be a number of STA Tonight call-outs. This will be a drastic change from previous years. The Advisory Council members can be of help by making the public understand that it does not necessarily mean that air quality in the winter time has become worse. It is related to the new standard and it is important to alert the public to do whatever they can to reduce pollutants on those evenings when the levels are expected to be high.

In response to Dr. Bedsworth's comments and concerns on ozone violations during this summer in the Bay Area, Ms. Roggenkamp explained that there were several days of exceedance; the trend is still downward and there is still a lot of work to be done in this area. As of now, during the last three years (2004, 2005 and 2006 summers), the District is still in

attainment of the Federal standard. However, it is unpredictable with regard to the attainment status for the future.

Dr. Holtzclaw noted that on the STA messages, the PM from wood smoke tends to be a little more concentrated in suburban valleys. Dr. Holtzclaw inquired if the District is going to target the announcements specifically to that or make them very general. Ms. Roggenkamp stated that it can be concentrated in certain areas on particular nights, depending on meteorological conditions, but for right now the messages are region-wide. The District will be looking at this issue with regard to wood smoke for the future. Mr. Altshuler stated that there are problems in the inland valleys (e.g. Napa, San Joaquin, Santa Clara, etc.); and it is more severe in those areas when there is an inversion and stagnation. He requested that whatever could be done to target those specific areas uniquely, rather than the entire Bay Area, would be more effective. Dr. Bornstein stated that modeling could help target areas that are susceptible during those meteorological conditions. Staff noted the comments.

Ms. Weiner stated that AB 32 focused primarily on Kyoto pollutants; however, a number of different organizations are also trying to include contributory pollutants for AB 32's targets to reduce emissions. It is possible that at some point there will be a small percentage of ozone or PM that will be included in the implementation plans.

Mr. Dawid stated that with reference to ozone, the region is split into five areas, and inquired if particulates are treated in the same manner. Kelly Wee, Director of Compliance & Enforcement, explained that the same five areas within the region are used for forecasting the air quality index. At the present time, PM_{2.5} future curtailment programs are being reviewed by staff, as to whether they should be region-wide or county-based. Some of the preliminary science indicates that PM_{2.5} tends to be airborne for longer periods and can spread out to areas other than where they may be concentrated in. The District is looking at a more regional approach to PM_{2.5}, and staff is continuing the scientific studies, analysis and possibly future modeling to try and identify whether some of these "hot" spots exist. Mr. Dawid commented that he was very impressed with San Joaquin Valley Air District's approach, using the county-based approach.

COMMITTEE REPORTS

- 3. Public Health Committee Meeting of October 10, 2006.** Mr. Bramlett stated that the Committee discussed the draft recommendations regarding Wood Burning Control Strategies, and recommended that it be presented to the full Advisory Council for adoption. The recommendations are being presented to the full Council today for its adoption.

Mr. Bramlett reported that the Committee is also working on the issue of Indoor Air Quality and Asthma. Dr Kmucha had drafted a letter which was mailed to the city and county health officers in order to respond to the request from District staff that this matter be addressed by the Committee as a priority item. As of this date, no responses have been received to the letter. There is no further information to be reported at this time.

The next Committee meeting is scheduled for Tuesday, December 12, 2006, at 10 a.m.

- 4. Air Quality Planning Committee Meeting of October 11, 2006.** Mr. Hayes stated that at the last Committee meeting, the Committee discussed the implementation of the resolution

that the Advisory Council adopted at its last meeting, to become carbon neutral and to go beyond that in an attempt to achieve the reductions, as adopted in AB 32. The first step the Committee took was to construct a Carbon Footprint Analysis of the Committee and, thereafter, of the full Council. Mr. Hayes distributed a template of the Carbon Footprint Analysis for the Year 2006: BAAQMD Advisory Council which the Committee developed. Mr. Hayes pointed out that there are some entries on the Carbon Footprint Analysis that are merely placeholders for the present time. These will be replaced by accurate data once they are received from the individual Council members. Mr. Hayes requested that each member review the Carbon Footprint Analysis and, if any data is incorrect, they submit the accurate data to him so that the correct figures could be incorporated into it for its completion. Mr. Hayes also pointed out that the largest amount of the Council's carbon footprint is due to the air travel to attend the Air & Waste Management Association's annual conference. The Committee is currently addressing the question as to how the footprints could be offset.

Mr. Hayes stated that the Committee felt it could identify an organization which could bundle contributions of money from organizations such as the District, for the purpose of funding projects to reduce carbon emissions. The Committee will be investigating this issue further. However, Mr. Hayes suggested that the Advisory Council review the Committee's future recommendations closely on this matter to ensure that the Council is convinced that the Committee is moving in the right direction proactively, and that it is accomplishing the goals of the resolution. Mr. Hayes explained details of the data required from Council members to complete the Carbon Footprint Analysis. Council members were requested to send their respective data, via email, to Mr. Hayes.

Mr. Hayes stated that the Committee heard a presentation at its last meeting on AB 32, its requirements and implementation schedule. The Committee discussed the possible implications of AB 32's passage for the Air District's Climate Protection Program and future Committee and full Advisory Council actions. Mr. Hayes distributed copies of the PowerPoint presentation to all Council members.

Mr. Hayes informed the Council that the next meeting of the Committee is scheduled for Wednesday, December 13, 2006. However, since some members had a conflict with this date, he requested staff to change the meeting to Thursday, December 14, 2006, starting at 9:30 a.m.

Chairperson Kurucz requested that Dr. Bornstein report briefly on the Technical Committee's plans, even though this item was not on the agenda. Dr. Bornstein stated that the Committee was trying to get the speaker from the South Coast AQMD to make a presentation to the Committee and to spend a day meeting with the District staff. At the last minute, the speaker was unable to come and it was too late to obtain another speaker. Dr. Bornstein is trying to schedule the speaker for the Committee's next meeting which will be held around the speaker's availability, probably during the second part of January, 2007.

- 5. Executive Committee Meeting of November 8, 2006.** Chairperson Kurucz stated that the Standing Committee Chairpersons reported on their respective Committee's work plans and noted that the Committee met and unanimously adopted the following slate of Officers for the Advisory Council Officers in 2007: Fred Glueck – Chairperson; Louise Bedsworth, Ph.D. – Vice-Chairperson; Harold Brazil - Secretary. In addition, the following Chairpersons

were selected for 2007: Technical Committee Chairperson: Sam Altshuler, P.E.; Public Health Committee: Jeffrey Bramlett; and Air Quality Planning Committee: Ken Blonski.

Chairperson Kurucz stated that an email will be sent to Advisory Council members in mid-December, 2006, requesting their choices for Committee assignments during 2007.

Speaker: The following individual spoke on Agenda Item No. 6:

Jenny Bard
American Lung Association of California
Santa Rosa, CA 95404

COMMITTEE RECOMMENDATION

- 6. The Public Health Committee Presented its Recommendations on Wood Burning Control Strategies.** *The Advisory Council considered the Public Health Committee's recommendation on Wood Burning control Strategies.*

Mr. Bramlett presented the following draft recommendations to the full Advisory Council for its consideration:

Topic

Recommendations that the Bay Area Air Quality Management District (District) can make to expand the wood smoke emissions reduction program in an effort to address wood smoke emissions in Bay Area communities and reduce particulate matter concentrations.

Importance/Implications

Particle pollution is the most lethal of air pollutants. It can lodge deep in the lungs and trigger asthma attacks, increase hospital admissions and cause people to die early. More than 2,000 peer-reviewed studies link particle pollution to lung disease. These studies show that tens of thousands of Americans are dying before their time because of exposure to particle pollution. Both short-term and long-term exposure is harmful.

The United States Environmental Protection Agency (EPA) has proposed new fine Particulate Matter (PM) standards to better address particle pollution be effective December 2006. Continuing studies show that fine particles adversely impact public health. Research indicates that wood smoke is a significant contributor to PM levels. The District estimates wood smoke may contribute up to 23% of the District's PM inventory and it is unlikely that the San Francisco Bay Area will meet the new standard for PM_{2.5}.

Recommendations

The District should continue current efforts and immediately develop and implement a program to further reduce wood smoke emissions. This program should be a multi-pronged effort and phased in over the next few years. Characteristics of this program should include:

- 1) Support the existing Wood Smoke Program through completion of the following elements.
 - a) Continue promotion of the Model Wood Smoke Ordinance.
 - b) Continue to study wood smoke emissions related to PM levels.
 - c) Continue monitoring of localized and community PM levels.
 - d) Continue the use of public outreach techniques that use languages representative of our diverse community.
 - e) Expand the existing public outreach to increase awareness of wood smoke impacts on PM levels and the harmful effects of elevated PM.
 - f) Expand the existing use of incentives to accelerate elimination of conventional wood burning devices. Develop partnerships with Pacific Gas and Electric and the Hearth, Patio, & Barbecue Association for change-outs of older conventional wood burning devices with lower-emitting models.
 - g) Develop and include as a part of the existing public outreach a list of fuels that should not be burned in residences. This list should include garbage, plastics, and construction debris and scrap materials that may contain or be covered with hazardous materials. Consider adding to the list of prohibited fuels wood products having moisture content greater than 20%.
 - h) Consider a wood stove crushing program.
- 2) Adopt Two-Stage Wood Smoke Curtailment program to follow the District's existing voluntary curtailment "Spare the Air Tonight" program and include a mandatory curtailment program as the second-stage.
 - a) Reduce the current threshold for Spare the Air Tonight events so that more events are called per season.
 - b) Consider setting the mandatory curtailment threshold at 25 micrograms per cubic meter for PM_{2.5}.
 - c) Create a rule to define and prohibit improper emissions from wood burning to provide enforcement officers a tool to prevent individuals creating emissions at the expense of public health.
 - d) Enact an opacity element applicable to residential wood burning emission to aid mandatory curtailment enforcement options.
- 3) Keep the Advisory Council informed as the wood smoke program reaches significant milestones in its development and implementation.

Key Issues

PM is one of the six criteria pollutants for which national and state standards have been established. It is already regulated from stationary sources through emission limits and from mobile sources through lower-emission vehicles, incentive buy-back programs, transportation control measures and smart growth policies. In addition to PM, carbon monoxide and carbon dioxide, wood smoke emissions contain toxic air contaminants.

Control measures that are effective and reduce wood smoke have already been adopted by other state and regional air quality agencies, such as the Puget Sound Clean Air Agency. The District can benefit from their experience with programs such as burning curtailment, regulatory standards on opacity and enforcement, increased public outreach, and incentives and grants implementation.

Information Considered

Members considered reports to the Committee from:

Jack Colbourn, Director, Outreach and Incentives Division, BAAQMD

Janet Glasgow, Air Quality Program Manager, Compliance and Enforcement Division,
BAAQMD

Jami Aggers, Compliance Manager, Compliance Division, San Joaquin Valley Unified Air
Pollution Control District

Jim Nolan, Director of Compliance, Puget Sound Clean Air Agency

Kathy Hayes, Government Affairs Director, North Bay Association of Realtors

John Crouch, Director of Affairs, Hearth, Patio and Barbecue Association (HPBA)

Judy Goldblatt, Public Information Officer, Outreach and Incentives Division, BAAQMD

Jenny Bard, Communications Director, American Lung Association of California

Deliberative Process

The Public Health Committee was asked to consider this topic by the Council as part of its work starting in 2006. The Committee met on February 14, April 11, May 10, July 18 and September 6, 2006, 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.

Mr. Bramlett stated that he would like changes made to the above recommendations as follows:

- a) Change No. 2, Item (c) to read: “Consider a process that defines improper emissions from wood burning and provides a tool for District staff to address emissions harmful to the public’s health.
- b) In No. 2, add the word “a” after the word “Adopt”.
- c) In No. 2, Item (d), delete the words “enforcement options”, and replace them with “efforts by the District staff”.

A motion was made by Ms. Adams to adopt the recommendations, with the altered language, as presented by Mr. Bramlett; seconded by Dr. Holtzclaw. A lengthy discussion followed. It was decided to discuss each of the three proposed changes made by Mr. Bramlett. Several Advisory Council members commented on the proposed changes.

The following changes to the proposed recommendations and the altered language were agreed upon:

- a) In the second paragraph, under “Importance/Implications”, the first sentence should read “Particle pollution is a lethal air pollutant.”
- b) Wherever “PM” is mentioned, it should be indicated as “PM_{2.5}”.
- c) Under “Recommendations”, Item No. 2, add the word “a” after “Adopt”, and at the end of the sentence after the words “second-stage”, add “and consider the following”.
- d) In No. 2, Item (b), delete the words “Consider setting”; start the sentence with “Set the mandatory....”. Add “(24-hour average) after PM_{2.5}”.

- e) In No. 2, Item (d), delete the word “mandatory” before “curtailment enforcement options”.

Advisory Council members suggested the following supplemental changes to Mr. Bramlett’s revised proposed recommendations:

- a) Under “Importance/Implications”, second paragraph to read “The United States Environmental Protection Agency (EPA) has proposed lower new fine Particulate Matter.....” (Sam Altshuler)
- b) Under “Importance/Implications”, Paragraph No. 1, third sentence, add the words “and cardiovascular” before the word “disease” (Sam Altshuler).
- c) Under “Importance/Implications”, in the last sentence, change “23%” to read “30% to 40% of peak winter PM_{2.5} levels”; delete the words “of the District’s PM inventory” (Sam Altshuler).

A motion was made by Ms. Licavoli-Farnkropf to adopt the revised recommendations, as presented by Mr. Bramlett earlier, along with the above supplemental changes; seconded by Dr. Holtzclaw. A further lengthy discussion ensued on the changes that were proposed.

It was agreed to discuss additional, further changes proposed by the Advisory Council members, and to make a motion on each of the proposed further changes. The following motions were made:

- i) A motion was made by Mr. Altshuler to (1) remove the words “and carbon dioxide” under “Key Issues”, last sentence. The revised sentence would read as “In addition to PM_{2.5} and carbon monoxide, wood smoke emissions contain toxic air contaminants”; (2) Under “Importance/Implications”, second paragraph, the first sentence to read “The United States Environmental Protection Agency (EPA) has adopted more stringent Particulate Matter (PM_{2.5}) standards.....”; and (3) Under “Importance/Implications”, last sentence to read “The District estimates wood smoke may contribute up to 30% to 40% of peak winter PM_{2.5} levels and it is unlikely that the San Francisco Bay Area will meet the new standard for PM_{2.5}.”; seconded by Mr. Hanna; unanimously carried.
- ii) A motion was made by Mr. Hanna to add the words, “or conversion” after the words “accelerate elimination” under “Recommendations”, No. 1, Item (f); seconded by Ms. Weiner; unanimously carried.
- iii) A motion was made by Mr. Dawid to change Recommendation No. 2 to read as “Adopt a Two-Stage Wood Smoke Curtailment program to follow the District’s existing voluntary curtailment “Spare the Air Tonight” program, e.g. declaration of “no-burn” days, as the second stage”; seconded by Dr. Holtzclaw. The motion failed.

Advisory Council’s Final Action: A motion was made by Dr. Holtzclaw that the Advisory Council accepts and adopts the revised recommendations, along with the changes agreed to, and the motions that were unanimously carried, on the Wood Burning Control Strategies; seconded by Ms. Weiner; unanimously carried.

The attached revised recommendations, as amended by the Advisory Council at today's meeting, will be forwarded to District staff for presenting them to the Board of Directors' Executive Committee for its consideration.

OTHER BUSINESS

7. Report of the Advisory Council Chair. Chairperson Kurucz reported that he had presented his report under Agenda Item No. 5.

8. Council Member Comments/Other Business.

- Mr. Altshuler stated that as a result of his attendance at the Air & Waste Management Association's (AWMA) Annual Conference in June, 2006, he submitted comments to the Critical Review Committee that were, thereafter, published in AWMA's October, 2006 Journal under Particulate Matter. Mr. Althsuler suggested that if any of the Advisory Council members publish any articles as a result of their activity, it should be noted for the betterment of the Advisory Council and for the Board of Directors' review. Chairperson Kurucz stated that a number of Council members attended the AWMA's Annual Conference and had either presented papers or participated on panel discussions.
- Mr. Dawid noted that the World Meeting on Climate Change is being held in Nairobi, when the Kyoto Plan will be reviewed.
- Mr. Dawid noted that the Supreme Court discussion on Indirect Source Review had ended, and based on the Justice's comments, it does not appear to be very promising.
- Mr. Dawid suggested that either the Technical Committee or the Planning Committee should be aware of the onslaught of diesel. Even though California presently has only ultra low sulfur diesel, it is expected that diesel cars are going to outnumber hybrid vehicles in the future. Chairperson Kurucz stated that this would be a good topic to address at the Council's January, 2007 Retreat. One of the Committees could find out more details on the issue.

9. Time and Place of Next Meeting. 10:00 a.m., Wednesday, January 10, 2007, 939 Ellis Street, San Francisco, CA 94109.

10. Adjournment. The meeting was adjourned at 12:05 p.m.

Neel Advani
Deputy Clerk of the Boards

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

November 8, 2006

To: Chair Uilkema and Members of the Executive Committee

From: Kraig Kurucz, Chairperson, Advisory Council

Subject: Wood Burning Control Strategies

Topic

Recommendations that the Bay Area Air Quality Management District (District) can make to expand the wood smoke emissions reduction program in an effort to address wood smoke emissions in Bay Area communities and reduce particulate matter concentrations (PM_{2.5}).

Importance/Implications

Particle pollution is a lethal air pollutant. It can lodge deep in the lungs and trigger asthma attacks, increase hospital admissions and cause people to die early. More than 2,000 peer-reviewed studies link particle pollution to lung and cardiovascular disease. These studies show that tens of thousands of Americans are dying before their time because of exposure to particle pollution. Both short-term and long-term exposure is harmful.

The United States Environmental Protection Agency (EPA) has adopted more stringent fine Particulate Matter (PM_{2.5}) standards to better address particle pollution effective December 2006. Continuing studies show that fine particles adversely impact public health. Research indicates that wood smoke is a significant contributor to PM_{2.5} levels. The District estimates wood smoke may contribute up to 30% to 40% of peak winter PM_{2.5} levels and it is unlikely that the San Francisco Bay Area will meet the new standard for PM_{2.5}.

Recommendations

The District should continue current efforts and immediately develop and implement a program to further reduce wood smoke emissions. This program should be a multi-pronged effort and phased in over the next few years. Characteristics of this program should include:

- 1) Support the existing Wood Smoke Program through completion of the following elements:
 - a) Continue promotion of the Model Wood Smoke Ordinance.
 - b) Continue to study wood smoke emissions related to PM_{2.5} levels.
 - c) Continue monitoring of localized and community PM_{2.5} levels.
 - d) Continue the use of public outreach techniques that use languages representative of our diverse community.
 - e) Expand the existing public outreach to increase awareness of wood smoke impacts on PM_{2.5} levels and the harmful effects of elevated PM_{2.5}.
 - f) Expand the existing use of incentives to accelerate elimination or conversion of conventional wood burning devices. Develop partnerships with Pacific Gas and Electric and the Hearth, Patio, & Barbecue Association for change-outs of older conventional

wood burning devices with lower-emitting models.

- g) Develop and include as a part of the existing public outreach a list of fuels that should not be burned in residences. This list should include garbage, plastics, and construction debris and scrap materials that may contain or be covered with hazardous materials. Consider adding to the list of prohibited fuels wood products having moisture content greater than 20%.
 - h) Consider a wood stove crushing program.
- 2) Adopt a Two-Stage Wood Smoke Curtailment program to follow the District’s existing voluntary curtailment “Spare the Air Tonight” program and include a mandatory curtailment program as the second-stage, and consider the following:
- a) Reduce the current threshold for Spare the Air Tonight events so that more events are called per season.
 - b) Set the mandatory curtailment threshold at 25 micrograms per cubic meter for PM_{2.5} (24-hour average).
 - c) Create a rule to define and prohibit improper emissions from wood burning to provide enforcement officers a tool to prevent individuals creating emissions at the expense of public health.
 - d) Enact an opacity element applicable to residential wood burning emission to aid curtailment enforcement options.
- 3) Keep the Advisory Council informed as the wood smoke program reaches significant milestones in its development and implementation.

Key Issues

PM_{2.5} is one of the six criteria pollutants for which national and state standards have been established. It is already regulated from stationary sources through emission limits and from mobile sources through lower-emission vehicles, incentive buy-back programs, transportation control measures and smart growth policies. In addition to PM_{2.5} and carbon monoxide, wood smoke emissions contain toxic air contaminants.

Control measures that are effective and reduce wood smoke have already been adopted by other state and regional air quality agencies, such as the Puget Sound Clean Air Agency. The District can benefit from their experience with programs such as burning curtailment, regulatory standards on opacity and enforcement, increased public outreach, and incentives and grants implementation.

Information Considered

Members considered reports to the Committee from:

Jack Colbourn, Director, Outreach and Incentives Division, BAAQMD

Janet Glasgow, Air Quality Program Manager, Compliance and Enforcement Division, BAAQMD

Jami Aggers, Compliance Manager, Compliance Division, San Joaquin Valley Unified Air Pollution Control District

Jim Nolan, Director of Compliance, Puget Sound Clean Air Agency

Kathy Hayes, Government Affairs Director, North Bay Association of Realtors

John Crouch, Director of Affairs, Hearth, Patio and Barbecue Association (HPBA)

Judy Goldblatt, Public Information Officer, Outreach and Incentives Division, BAAQMD

Jenny Bard, Communications Director, American Lung Association of California

Deliberative Process

The Public Health Committee was asked to consider this topic by the Council as part of its work starting in 2006. The Committee met on February 14, April 11, May 10, July 18, September 6, and October 10, 2006, 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.

As amended by the Advisory Council at its meeting on November 8, 2006.

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

December 13, 2006

To: Chair Gayle B. Uilkema and Members
of the Board Executive Committee

From: Kraig Kurucz, Chairperson, Advisory Council

Subject: Wood Burning Control Strategies

Topic:

Recommendation from the Advisory Council on Wood Burning Control Strategies.

Background:

At the Advisory Council's January 11, 2006, Regular Meeting and Retreat, the Air District's management presented key issues facing the District. One of the issues and proposed areas of study for the Advisory Council was wood burning control strategies. The Advisory Council was a leader in formulating the Air District's model wood burning ordinance. This ordinance has made progress in reducing emissions from wood burning devices in the District. Staff requested that the Advisory Council continue this work by reviewing and recommending the available emission control option(s) best suited to the District to further control the emissions from wood burning devices.

The Public Health Committee and Advisory Council held the following meetings at which wood burning was discussed (only key 2006 meetings are noted):

- (a) Public Health Committee Meeting, February 14, 2006 – Staff provided a presentation on wood smoke outreach and education at the District, as well as wood smoke abatement efforts in the San Joaquin Valley and Puget Sound air districts.
- (b) Public Health Committee Meeting, April 11, 2006, Guest Speakers: (1) Jim Nolan, Director of Compliance, Puget Sound Clean Air Agency – presented the Puget Sound “Wood Smoke Control Program, April 2006.” (2) Jami Aggers, Compliance Manager, Compliance Division, San Joaquin Valley Unified Air District – on San Joaquin Valley Air District wood smoke abatement program.
- (c) Public Health Committee Meeting, May 10, 2006, Guest Speakers: (1) John Crouch, Director of Public Affairs of the Hearth, Patio & Barbeque Association – presented “Wood Smoke Abatement Program Application.” (2) Kathy Hayes, Government Affairs Director, North Bay Association of Realtors – on point-of-sale applications and ordinances.

- (d) Public Health Committee Meeting, September 6, 2006, Guest Speaker: Jenny Bard, American Lung Association (ALA) – presented the ALA’s recommendations on wood smoke. The Committee discussed an initial draft of possible recommendations on wood burning control strategies to be presented to the full Council at a later date.
- (e) Public Health Committee Meeting, October 10, 2006 – continued deliberations and discussion on finalizing the draft recommendations regarding wood smoke emissions to be presented to the full Council at its November 8th Regular meeting.
- (f) Council Meeting, November 8, 2006 – adoption of the Committee recommendations on Wood Burning Control Strategies.

The recommendation on Wood Burning Control Strategies, as approved by the Advisory Council at its meeting on November 8, 2006, is attached for your review and consideration.

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

November 8, 2006

To: Chair Uilkema and Members of the Executive Committee

From: Kraig Kurucz, Chairperson, Advisory Council

Subject: Wood Burning Control Strategies

Topic

Recommendations that the Bay Area Air Quality Management District (District) can make to expand the wood smoke emissions reduction program in an effort to address wood smoke emissions in Bay Area communities and reduce particulate matter concentrations (PM_{2.5}).

Importance/Implications

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Recommendations

The District should continue current efforts and immediately develop and implement a program to further reduce wood smoke emissions. This program should be a multi-pronged effort and phased in over the next few years. Characteristics of this program should include:

- 1) Support the existing Wood Smoke Program through completion of the following elements:
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 - b) Continue to study wood smoke emissions related to PM_{2.5} levels.
 - c) Continue monitoring of localized and community PM_{2.5} levels.

- d) Continue the use of public outreach techniques that use languages representative of our diverse community.
 - e) Expand the existing public outreach to increase awareness of wood smoke impacts on PM_{2.5} levels and the harmful effects of elevated PM_{2.5}.
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 - b) Set the mandatory curtailment threshold at 25 micrograms per cubic meter for PM_{2.5} (24-hour average).
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 - 3) Keep the Advisory Council informed as the wood smoke program reaches significant milestones in its development and implementation.

Key Issues

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Information Considered

Members considered reports to the Committee from:

Jack Colbourn, Director, Outreach and Incentives Division, BAAQMD

Janet Glasgow, Air Quality Program Manager, Compliance and Enforcement Division, BAAQMD

Jami Aggers, Compliance Manager, Compliance Division, San Joaquin Valley Unified Air Pollution Control District

Jim Nolan, Director of Compliance, Puget Sound Clean Air Agency

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John Crouch, Director of Affairs, Hearth, Patio and Barbecue Association (HPBA)

Judy Goldblatt, Public Information Officer, Outreach and Incentives Division, BAAQMD

Jenny Bard, Communications Director, American Lung Association of California

Deliberative Process

The Public Health Committee was asked to consider this topic by the Council as part of its work starting in 2006. The Committee met on February 14, April 11, May 10, July 18, September 6, and October 10, 2006, 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.

As amended by the Advisory Council at its meeting on November 8, 2006.

BAY AREA AIR QUALITY MANGEMENT DISTRICT

Memorandum

To: Chair, Gayle B. Uilkema and
Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 10, 2006

Re: Production System Project Plan

RECOMMENDED ACTION:

Receive and File.

DISCUSSION:

Staff has previously reported on work in progress on the production system portion of the District's Information technology infrastructure including re-engineering of District business process, re-architecting of the District database structure and pilot implementations. Staff will report on results of this work.

Following the report on accomplishments, staff will present the plan to ramp up to full scale implementation. Much of this material will mirror the December 19, 2006 presentation to the Budget and Finance Committee.

After a careful phase of scoping and pilot work characterized by a very low rate of expenditure, the District has created a detailed Project Plan and proposes to begin execution of the plan. Execution of the plan will be accompanied by detailed reports on the status of actual costs as compared to projected costs, and by detailed reports on the status of actual accomplishments as compared to projected accomplishments. Staff will present a description of the Project Team structure, a description of the anticipated timeline, and an estimate of the cost.

The Project is composed of nine remaining phases. The cost of the first four phases is firmly targeted at \$2.8M in total. The cost of the remaining five phases is expected to total an equal amount (\$2.8M). Further refinement of the cost target for the final five phases will be allowed by completion of the first four phases.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The action recommended to the Budget and Finance Committee on December 19, 2006 will result in the transfer of \$1,000,000 from the Undesignated Reserve into the Reserve for Production System.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jeffrey McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chair Gayle B. Uilkema and Members
of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 12, 2006

Re: Consideration of Board of Directors Attendance at the Air & Waste
Management Association (A&WMA) People to People Programs 2007
China Delegation

RECOMMENDED ACTION

Consider recommending approval of requests for Board of Directors' attendance at the A&WMA's People to People Program 2007 delegation in China and the creation of a line item in the amount of \$25,000 in Program 121 for the fiscal year 2007/2008 budget.

BACKGROUND

An opportunity exists for members of the Bay Area Air Quality Management District Board of Directors to participate in the A&WMA People to People Programs 2007 delegation to meet in China.

People to People Ambassador Programs is arranging to have a delegation of Air & Waste Management Association professionals travel to China October 7-19, 2007. Delegates will visit universities, institutions, and environmental agencies and will meet with leaders and colleagues in the air and waste management field. The exchange will include extensive discussions on NO_x and SO_x control; air toxics, including dioxins and furans; hazardous, medical and municipal waste incineration; particulate matter and mercury control; and biomass for fuel and the health effects of air pollution.

Delegates will visit three primary areas – Beijing, Xi'an, and Kunming – experiencing the culture and heritage of China along the way.

DISCUSSION

The estimated cost per delegate is \$4,995.00 (departing from Los Angeles). This includes round-trip airfare from the departure city, group transportation, meetings, and cultural activities, accommodations, most meals and all other costs associated with participation.

Staff is recommending approval of a line item for the FY 2007/2008 budget in the amount of \$25,000 in Program 121 to allow for Board of Directors' attendance and participation at this meeting. Directors attending this meeting may be asked to contribute a percentage towards the trip based on the number of requests. Currently there are ten Board members interested in becoming a delegate.

Due to the extensive planning and communication involved in coordinating the program, the People to People Ambassador Programs has asked that a response with intentions be made as soon as possible.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The action recommended will result in a line item in the amount of \$25,000 in Program 121 for fiscal year 2007/2008 budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mary Ann Goodley
Reviewed by: Brian Bunger

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chair, Gayle B. Uilkema and Members
of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: December 12, 2006

Re: Joint Policy Committee Update

RECOMMENDED ACTION:

Receive and file.

DISCUSSION

At the December 21, 2006, meeting of the Executive Committee, Ted Droettboom will provide an update on the activities of the Joint Policy Committee.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO