



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ADVISORY COUNCIL REGULAR MEETING

WEDNESDAY
NOVEMBER 8, 2006
10:00 A.M.

SEVENTH FLOOR BOARD ROOM
939 ELLIS STREET
SAN FRANCISCO, CA 94109

AGENDA

CALL TO ORDER

Opening Comments
Roll Call

Kraig Kurucz, Chairperson
Clerk

PUBLIC COMMENT PERIOD

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3. The public has the opportunity to speak on any agenda item. All agendas for Advisory Council meetings and Committee meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Council's or Committee's purview. Speakers are limited to five minutes each.

PROCLAMATION/COMMENDATION

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

CONSENT CALENDAR (ITEM 1)

1. Approval of Minutes of September 13, 2006

AIR DISTRICT OVERVIEW

2. Report of the Executive Officer/APCO

Jack P. Broadbent

The Executive Officer/APCO will provide an update on pending and planned District activities, policies and initiatives.

COMMITTEE REPORTS

3. Public Health Committee Meeting of October 10, 2006 Jeffrey Bramlett
4. Air Quality Planning Committee Meeting of October 11, 2006 Stan Hayes
5. Executive Committee Meeting of November 8, 2006 Kraig Kurucz

COMMITTEE RECOMMENDATION

6. The Public Health Committee will Present its Recommendation on Wood Burning Control Strategies

The Advisory Council will consider the Public Health Committee's recommendation on Wood Burning Control Strategies.

OTHER BUSINESS

7. Report of Advisory Council Chair Kraig Kurucz
8. Council Member Comments/Other Business

Council or staff members on their own initiative, or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on their own activities, provide a reference to staff about factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda.

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

KK:mr

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

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

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

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

NOVEMBER 2006

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting (<i>Meets 1st & 3rd Wednesday of each Month</i>)	Wednesday	1	9:45 a.m.	Board Room
Advisory Council Executive Committee	Wednesday	8	9:00 a.m.	Room 716
Advisory Council Regular Meeting	Wednesday	8	10:00 a.m.	Board Room
Board of Directors Mobile Source Committee (<i>Meets 2nd Monday of each Month</i>) - RESCHEDULED TO DECEMBER 18, 2006	Monday	13	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Personnel Committee (<i>At the Call of the Chair</i>) - TO BE RESCHEDULED	Tuesday	14	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting (<i>Meets 1st & 3rd Wednesday of each Month</i>) - CANCELLED	Wednesday	15	9:45 a.m.	Board Room
Board of Directors Executive Committee (<i>At the Call of the Chair</i>) - TO BE RESCHEDULED	Thursday	16	9:30 a.m.	4 th Floor Conf. Room
Joint Policy Committee	Friday	17	10:00 a.m. – Noon	MetroCenter Auditorium 101 – 8 th Street Oakland, CA 94607
Board of Directors Budget & Finance Committee (<i>Meets 4th Wednesday of each Month</i>)	Wednesday	22	9:45 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee (<i>Meets 4th Monday of Every Quarter</i>)	Tuesday	28	9:30 a.m.	Board Room

DECEMBER 2006

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Personnel Committee <i>(Meets at the Call of the Chair)</i>	Monday	4	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	6	9:45 a.m.	Board Room
Advisory Council Public Health Committee	Tuesday	12	10:00 a.m.	Room 716
Advisory Council Air Quality Planning Committee	Wednesday	13	9:30 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Monday of each Month)</i>	Monday	18	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	20	9:45 a.m.	Board Room
Board of Directors Executive Committee Meeting <i>(Meets at the Call of the Chair)</i>	Thursday	21	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday of each Month)</i>	Wednesday	27	9:45 a.m.	4 th Floor Conf. Room

JANUARY 2007

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	3	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 2nd Monday of each Month)</i>	Monday	8	9:30 a.m.	4 th Floor Conf. Room
Advisory Council Executive Committee	Wednesday	10	9:00 a.m.	Room 716
Advisory Council Retreat and Regular Meeting	Wednesday	10	10:00 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	17	9:45 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday of each Month)</i>	Wednesday	24	9:45 a.m.	4 th Floor Conf. Room

mr
11/1/06 (11:16 a.m.)
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Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

DRAFT 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 District, California Council on 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 Astrow 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 12:31 a.m.

Neel Advani
Deputy Clerk of the Boards

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

DRAFT MINUTES

Advisory Council Public Health Committee Meeting
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

Draft Minutes of October 10, 2006 Public Health Committee Meeting

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

Draft Minutes of October 10, 2006 Public Health Committee Meeting

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

Draft Minutes of October 10, 2006 Public Health Committee Meeting

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

September 15, 2006

To: Advisory Council
From: Jeffrey Bramlett, Chairperson, Advisory Council Public Health Committee
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.

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 by 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.