



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ADVISORY COUNCIL MEETING

WEDNESDAY
MAY 13, 2009
9:00 A.M.

7TH FLOOR BOARD ROOM
939 ELLIS STREET
SAN FRANCISCO, CA 94109

AGENDA

CALL TO ORDER

Opening Comments
Roll Call

Harold Brazil, 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 regular meetings are posted at the District, 939 Ellis Street, San Francisco, at least 72 hours before a meeting. At the beginning of the meeting, an opportunity is also provided for the public to speak on any subject within the Council's purview. Speakers are limited to three minutes each.

CONSENT CALENDAR

1. Approval of Minutes of the April 8, 2009 Advisory Council Meeting.

PRESENTATION: CALIFORNIA'S 2050 GHG EMISSION REDUCTION TARGET – TRANSPORTATION SECTOR

2. California's 2050 GHG emission reduction target of 80% below 1990 levels - transportation sector.

Speakers from Metropolitan Transportation Commission, University of California, Davis (ITS-Davis), BART & Livable City, and CALSTART will present materials on GHG emission reduction strategies for the transportation sector:

- A. **Regional Transportation Plan 2035: Change in Motion**
Steve Heminger
Executive Director, Metropolitan Transportation Commission

B. Vehicle Technology & Travel Reduction

Dan Sperling
Professor of Civil Engineering and Environmental Science and Policy, ITS- Davis
Automotive Related Member of the California Air Resources Board

C. Land Use, Public Transit & Trip Reduction

Tom Radulovich
BART Director – San Francisco
Executive Director, Livable City

D. Goods Movement

John Boesel
President & CEO, CALSTART

PANEL DISCUSSION

3. Transportation Sector GHG Emission Reduction Strategies for California and the Bay Area

The four speakers will convene as a panel for a discussion with the Advisory Council and Air District staff on GHG emission reduction strategies for the transportation sector and the implications for the Air District's regulatory agenda, legislative agenda, and programs.

OTHER BUSINESS

4. Council Member Comments/Other Business

Council members may make a brief announcement, provide a reference to staff about factual information, or ask questions about subsequent meetings.

5. Time and Place of Next Meeting

9:00 a.m., Wednesday, July 8, 2009, 939 Ellis Street, San Francisco, CA 94109.

6. Adjournment

CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109

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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.
- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the District's offices at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body. Such writing(s) may also be posted on the District's website (www.baaqmd.gov) at that time.

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

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

MAY 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Budget & Finance Committee <i>(At the Call of the Chair)</i>	Wednesday	6	9:15 a.m.	Room 716
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	6	9:45 a.m.	Board Room
Board of Directors Public Outreach Committee <i>(Meets 1st Thursday every other Month)</i>	Thursday	7	9:30 a.m.	4 th Floor Conf. Room
Advisory Council Regular Meeting	Wednesday	13	9:00 a.m.	Board Room
Board of Directors Legislative Committee <i>(Meets 2nd Thursday of each Month) - CANCELLED</i>	Thursday	14	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Climate Protection Committee <i>(Meets 2nd Thursday each Month)</i> -- TO BE RESCHEDULE	Thursday	14	9:30 a.m.	4th Floor Conf. Room
Joint Policy Committee	Friday	15	10:00 a.m.	MTC Auditorium 101 8 th Street Oakland, CA 94607
Board of Directors Executive Committee <i>(At the Call of the Chair)</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 Personnel Committee – <i>(At the Call of the Chair)</i>	Wednesday	27	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee <i>– (Meets 4th Thursday of each Month)</i>	Thursday	28	9:30 a.m.	4 th Floor Conf. Room

JUNE 2009

<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 Public Outreach Committee <i>(Meets 1st Thursday every other Month)</i>	Thursday	4	9:30 a.m.	4 th Floor Conf. Room

JUNE 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Legislative Committee <i>(Meets 2nd Thursday of each Month)</i>	Thursday	11	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Climate Protection Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	11	Immediately Following Legislative Cme. Meeting	4 th Floor Conf. 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 Mobile Source Committee -- <i>(Meets 4th Thursday of each Month)</i>	Thursday	25	9:30 a.m.	4 th Floor Conf. Room

JULY 2009

<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 Regular Meeting	Wednesday	8	9:00 a.m.	Board Room
Board of Directors Legislative Committee <i>(Meets 2nd Thursday of each Month)</i>	Thursday	9	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Climate Protection Committee <i>(Meets 2nd Thursday each Mont)</i>	Thursday	9	Following Legislative Cme. Mtg.	4th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	15	9:45 a.m.	Board Room
Joint Policy Committee	Friday	17	10:00 a.m.	MTC Auditorium 101 8 th Street Oakland, CA 94607
Board of Directors Stationary Source Committee <i>(Meets 3rd Monday Quarterly)</i>	Monday	20	9:30 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(At the Call of the Chair)</i>	Wednesday	22	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee -- <i>(Meets 4th Thursday of each Month)</i>	Thursday	23	9:30 a.m.	4 th Floor Conf. Room

HL – 5/1/09 (9:35 a.m.)
P/Library/Forms/Calendar/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Brazil and
Members of the Advisory Council

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 27, 2009

Re: Advisory Council's Draft Meeting Minutes of April 8, 2009

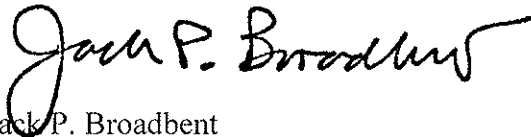
RECOMMENDED ACTION

Approve attached draft minutes of the Regular Advisory Council's meeting of April 8, 2009.

DISCUSSION

Attached for your review and approval are the draft minutes of the April 8, 2009 meeting.

Respectfully submitted,



Jack P. Broadbent
Executive Officer/APCO

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
(415) 749-5000

DRAFT MINUTES

Advisory Council Regular Meeting
9:00 a.m., Wednesday, April 8, 2009

CALL TO ORDER

Opening Comment: Chairperson Brazil called the meeting to order at 9:03 a.m.

Roll Call: Chairperson Harold Brazil; Secretary Ken Blonski; Council Members, Jennifer Bard, Benjamin Bolles, Robert Bornstein, Ph.D., Emily Drennen, MPA, Stan Hayes, John Holtzclaw, Ph.D., Robert Huang, Ph.D., Kraig Kurucz, M.S., Rosanna Lerma, Jane Martin, Dr.P.H., Sara Martin-Anderson, M.P.P., Kendal Oku, Neal Osborne, Jonathan Ruel, Dorothy Vura-Weis, M.D., M.P.H.

Absent: Louise Wells Bedsworth, Ph.D., Vice Chairperson Jeffrey Bramlett, Karen Licavoli-Farnkopf, MPH

Public Comment Period: There were no public comments.

Consent Calendar: Approval of Minutes of the February 11, 2009 and the March 11, 2009 Advisory Council Meetings.

February 11, 2009 Minutes:

Council Action: Member Holtzclaw made a motion to approve the minutes of February 11, 2009; Member Blonski seconded the motion; unanimously carried without objection.

March 11, 2009 Minutes:

Councilmember Bard requested the following amendment to page 3:

- “Bard: Requested an explanation of a stationary source below major ~~first~~ source categories.”

Council Action: Member Holtzclaw made a motion to approve the minutes of March 11, 2009, as amended; Member Blonski seconded the motion; unanimously carried without objection.

Discussion of Advisory Council Member attending the Annual Air & Waste Management Association (A&WMA) Meeting in June:

Chairperson Brazil announced that the A&WMA Conference would be held in Detroit, Michigan June 16-19, 2009 and those interested Council Members (maximum of 4) wishing to attend should contact Executive Office staff no later than April 15, 2009 to register. Dr. Bornstein indicated that he was unable to attend.

AIR DISTRICT OVERVIEW

Report of the Executive Officer/APCO

- District staff is involved with finalizing the Proposed Budget for FY Ending 2010;
- The Budget and Finance Committee reviewed the Proposed Budget twice, discussed revenue from permits and reduced county property tax of between 3% and 5%. The District is holding expenses and discretionary funding; reserves match guidance received from the Board of Directors; and the District is holding FTE's and attempting not to fill vacancies;
- Staff is working on a variety of programs: Bay Area Clean Air Community Initiative, which deals with the results of the CARE program and taking steps to address cumulative impacts in communities.

Senior Advanced Project Advisor, Dr. Phil Martien, said that a component of addressing cumulative impacts is an indirect source rule; such a rule will allow the District to encourage infill development in the Bay Area related to reduction of emissions, toxic compounds, criteria pollutants and GHGs. The Air District wants to ensure it is not over-burdening areas and is reversing the trend and through a variety of efforts, permitting requirements are being modified and made stricter/modified and in some core areas are being designated through the CARE area and sensitive receptors. Additionally, a working group is meeting with the CARE Task Force. He noted that results of the overall impact will be brought to the April 20, 2009 Stationary Source Committee.

Overview of 2008/2009 PM Season – Staff Presentation by Dick Duker, Meteorology and Quality Assurance Manager

Presentation Highlights:

- Winter 08-09 / 07-08 PM Season Summary showing more drought like winter conditions and as a result, the number of days the PM 2.5 standard was exceeded increased from last year.
- There were 11 days over the PM 2.5 standard this winter compared to 7 days last winter and correspondingly, Winter Spare the Air Alerts were called on 11 days as compared to 6 days last winter.
- Seasonal rainfall totals were presented from November 1, 2008 through February 28, 2009 as well as the number of days the PM 2.5 was exceeded.
- Winter was unusually warm and dry, with daytime temperatures in the low 70's which is due to high pressure systems over California.
- Transport has been more of a factor than in previous winters.
- Satellite images presented from March 10, 2009 (clear conditions). PM levels in the Central Valley were about twice the PM 2.5 standard while those in the Bay Area were

below PM 2.5 standard. During the period, they had northerly winds that kept the valley PM out of the Bay Area. However, on January 17, 2009 winds changed and PM 2.5 standard was exceeded in the Bay Area.

- Bay Area PM 2.5 trends presented and three year averages for each three year period since 2001.
- 2006-EPA reduced National PM 2.5 standard from 65 to 35 ug/m³
- 2008-EPA made attainment/nonattainment designations-Bay Area designated as nonattainment.
- Plans for attainment due 3 years after effective date (2012)
- Attainment 5 years after effective date (2014)

To reduce PM and precursors, the Board adopted SB 656 Particulate Matter Implementation Schedule in November 2005 and the Wood Burning Rule in July of 2008 (included in SB 656 schedule). Since 2005, Board has adopted 15 rules to reduce ozone & PM precursors and directly emitted PM. Staff are developing 2009 Bay Area Clean Air Plan (CAP) which will be presented to the Board for adoption.

Air District staff are analyzing the effects of the Wood Burning Rule and will present the results of the analyses at the April 20th Stationary Source Committee meeting. Analyses include:

- Field and telephone surveys
- Comparison with previous years
- PM modeling
- PM transport
- PM composition

The next Advisory Council meeting will focus on and address the transportation sector and efforts geared toward meeting the 80% reduction goal in GHG emissions called for under AB 32. The following four speakers have been invited to attend:

- Steve Heminger, Executive Director of Metropolitan Transportation Commission;
- Dan Sperling, Professor of Civil Engineering and Environmental Science and Policy, ITS- Davis;
- John Boesel, President & CEO of WestStart-CALSTART; and
- Tom Radulovich, BART Director – San Francisco

Advisory Council Discussion/Comments:

Mr. Blonski questioned why Santa Rosa rainfall was used and what attributed to the even year patterns. Mr. Duker noted there are 5 rain gages in the Bay Area; Santa Rosa has one of the District's more complete records and typically picks up rainfall if a storm does not come far enough south. When forecasting, particularly when the previous day estimates cannot be used like a holiday, staff will go back 5-10 years, look at solar data, and divide information into categories to determine weather patterns. He noted the deviation from 2000-2003 does not truly fit the pattern, as there was a lot of transport early on in the season and it may have been due to the occurrence of drought conditions for 1-2 months and then a lot of rain in January/February. Regarding why it is every other year, Mr. Duker said the actual data is what is revealed.

Mr. Blonski referred to the Bay Area PM 2.5 Trends graph and believed Fremont might reflect trends closer to San Jose or vice versa as opposed to Santa Rosa. Mr. Duker observed that San Jose has down valley flow at night; it is in the center of the Santa Clara Valley and winds are from the southeast, creating down valley flow. Fremont is not in that valley and is off to the side, and it has its own local sources. The topography trumps the geographical, as well as the volume of traffic in San Jose. Mr. Duker said Fremont can also be seeing some terrain effects too, as it has hills to its east and if this area does not have a lot in the way of emissions, it could be pushing clean air across a close monitor to the hills.

Dr. Vura-Weis questioned: 1) Whether or not the District had information on what percent of the particulate matter is from local sources versus what comes in from the Central Valley; 2) Are there measures being taken at the Central Valley air district which will improve air quality here; and 3) Would changes in the emissions locally be adequate to reduce the number of non-attainment days. Mr. Duker said questions 1 and 3 are something being reviewed through modeling and will be discussed on April 20th. Staff hopes to determine what percentage is coming in from the Central Valley but a portion does not occur everyday. If there is a stagnant period, transport is not an issue.

Regarding question 2, Mr. Duker said the standard is 35 micrograms, but they were seeing 60-72 micrograms in the Central Valley and with easterly winds, this would lead to an exceedance somewhere in the Bay Area. Mr. Broadbent reported that the Central Valley has a number of measures they are planning to put in place or are already in place; the Central Valley is generally considered to be the second worst air quality in the country in terms of concentration of PM and ozone. He noted that the Central Valley Air Board adopted a wood burning ordinance 5 years ago, recently lowered the trigger level to 30 micrograms, they have developed and are implementing aggressive new measures and clearly contribute to the Bay Area's problem, as well.

Ms. Drennen questioned: 1) The increased requirement for infill in terms of approving permits and whether this would be relegated to CARE identified areas or broader areas where there might be hot spots; and 2) Is there a standardized definition for sensitive receptors. Brian Bateman said much of this work is still in progress; staff is trying to define the boundaries of the impacted communities, looking outside the broad definition of impacted communities, applying more stringent standards in other areas, and perhaps there are smaller geographic areas within that category.

Regarding sensitive receptors, staff is researching this now. There are different definitions and types of things staff is thinking about include hospitals, day care centers, schools and senior housing. From a technical standpoint, Mr. Bateman said it is important to know where they are, have the information updated on a regular basis and be able to display it clearly as boundaries on a map. When their health risk assessment analysis is done, it is very much a micro-scale analysis where the impacts can vary significantly.

Ms. Drennen questioned if staff was using population density as a criterion for definitions of areas. Mr. Duker said they recently looked at revising the impacted area of maps which were originally based on emissions; however, new ones are based on regional modeling at a one kilometer resolution. The areas are likely to change and will pick up areas not included in the

past. Regarding population, staff has identified where there are exposures in addition to looking where emissions are high and believes these are based on population of sensitive receptors.

Ms. Drennen discussed the need for, and benefit of, trees and questioned whether the Air District funded tree planting, especially in urban areas where it would have a great impact. Mr. Broadbent said the District has actually funded some projects; i.e., part of the Conoco Phillips project calls for tree planting efforts. They also actually cut down trees such as Eucalyptus which contributes to smog, and he said this measure is planned for.

Mr. Huang referred to station location, questioned criteria for selecting a station, and questioned whether the station was changed over time. Mr. Duker said many station locations have been in place for 20-30 years. He has been involved in writing the annual Network Plan required by EPA and they want to know why stations are chosen. They have tended to locate stations in high population areas and have chosen the largest 20 or 30 cities to cover population exposure. At times they will locate stations for photochemical modeling, to measure something the District knows is very clean or something that is measuring transport coming in from another district.

Staff also began some mobile sites; they ran a site in Benicia for a year and a site in Berkeley for two years. They have conducted special studies and verification in mountain tops where modeling had shown high ozone concentrations, and at times leases have been lost which results in relocations. They have also been more receptive to community groups who want modeling in areas. However, he noted that 80% of sites are stationary and staff will continue to collect data from various cities to arrive at statistical relationships which assist in determining permanent sites.

Dr. Holtzclaw questioned and confirmed that the San Francisco station was located at 16th and Arkansas. Staff explained that the population density is not terribly high, it is an industrial area between two freeways and is a lot dirtier than other parts of the City and EPA wants collection of data in some areas of highest expected concentration.

Mr. Hayes suggested re-doing the plot to look at the highest levels and plotting this versus rainfall. He asked staff to look at the value of the 98th percentile concentration in each year, stating that small changes in this could result in much larger changes in the number of days over the standard.

Sarah Martin-Anderson questioned whether modeling in the Central Valley will include export as well as import, and she questioned whether there were partnership(s) with the Air District and the Central Valley Air District. Mr. Duker said he suspects the modeling would focus on the days seeing transport into the Bay Area; however, the subject has come up in terms of ozone where the Central Valley believes the Bay Area contributes to the Central Valley's ozone problem. Their staff has spent a lot of time and effort on field studies to collect data and conduct modeling. He said the Bay Area's precursors and ozone does have some effect, but he was not sure what percent it was. He did not believe staff would model the reverse; the Air District only had 11 days over the standard and this is not as big a factor for the Central Valley, as more than half of their days are over the standard, which are caused by their own sources and weather.

Mr. Broadbent said there have been a number of studies that have tried to characterize the movement of air from the different air basins. There is general acceptance that the Bay Area does

contribute to ozone in the Central Valley and Sacramento regions, but the debate has always been the amount of contribution and unfortunately the subject of heated debate. Over time, the Air District has taken the approach of looking at all available control measures, it adopts what is available to ensure we are protecting the Bay Area and what plays a role in contributing to their ozone reduction efforts. The PM picture is something that is evolving. Under certain conditions, the Central Valley does contribute to the Bay Area levels here and this issue should be brought up as well.

Regarding partnerships, Mr. Broadbent said the Air District works with Central Valley representatives, shares resources on inter-district projects to help clean up railroad operations, trucking operations, and most recently have discussed operations that would take containers from the road and put them on barges to go up the Sacramento River to Stockton.

Mr. Bolles questioned the potential for hiring an Environmental Health Officer. Mr. Broadbent said he anticipates that at the April 15th Board of Directors meeting, the Advisory Council could provide a presentation on the Advisory Council's recommendations which would include utilizing an existing vacancy for the proposed Health Officer position .

Ms. Bard referred to the Air District's Wood Burning Rule which has been in effect for a year and questioned why there are increased levels over the PM 2.5 standard and double the numbers of PM exceedances. Mr. Broadbent said meteorological changes in the Bay Area play such a dominant role in PM levels; with a very rainy season, it affects how many days the standard is exceeded. The question comes down to how many days they would have seen over the standard if the program was not in place. He expects that this number would be considerably higher, given such stagnant conditions without any rain.

Ms. Bard questioned whether or not all exceedances for PM occurring in the wintertime caused the Air District to be a non-attainment status. Mr. Broadbent noted there is a 24-hour standard and an annual average standard; the Air District does not currently exceed the annual average standard, and most exceedances occur during the wintertime. Mr. Duker agreed, but said there were also exceedances due to the forest fires and from an October day, which was unusual.

Chairperson Brazil confirmed that nitric acid was a key secondary component of PM 2.5 and it reacted with ammonia nitrate in California and with ammonium sulfate in the east. He also confirmed that the Air District was barely over the 35 microgram standard. Mr. Broadbent said the EPA has yet to define explicit attainment status but has defined the District to be a non-attainment area. And, like ozone, the District might be considered marginal non-attainment; however, each microgram is more difficult to pull from the air and it is more difficult in terms of planning and regulatory requirements. He said designations will become effective this year, plans will be due in 3 years, and EPA must decide, given these areas, what are going to be the requirements. They could be an inventory or a full-blown federal implementation plan to explain how to come into compliance. The Air District has taken the approach that it is a public health issue and this was one reason why the wood burning control measure was put into place.

Dr. Bornstein assumed the multi-pollutant plan includes modeling and he confirmed with Mr. Broadbent that the Advisory Council's work has been very helpful in formulating and looking at modeling from an integrated standpoint. Mr. Broadbent said staff believes there are trade-off's

from a technical or policy standpoint which need to be put before the Board and staff will be briefing the Advisory Council on this as it moves forward.

Dr. Bornstein said the number of bad days and Spare the Air days were almost identical; he questioned if there was an overlap or did the Spare the Air days prevent numbers from occurring, and he questioned how well were the bad days forecasted. Mr. Duker said it happened that the numbers can out equally to 11 days and he thought that approximately 2/3 were being accurately forecasted and called as Spare the Air days. He hopes modeling will provide information about what actually happens and then either increase or decrease emissions depending upon whether or not a Spare the Air day was called or not.

Dr. Bornstein noted that odor was still in a very qualitative state where samples are taken and people smell it, but there are no real instruments to determine odors. Regarding tree planting, he said he was part of a large project with the Sacramento Municipal Air Quality Management District which involves CARB and a well-known Berkeley scientist who is planting trees in his model to reduce the heat island to see how it affects ozone. Therefore, he believed that heat island reduction is another effect from planting trees and noted that the EPA assigns emission reduction credits for this. Mr. Broadbent said he believed this was part of the plan update.

Continued discussion of Draft Report on the Advisory Council's February 11, 2009 Meeting on Air Quality and Public Health.

Chairperson Brazil introduced the item and opened the public comment period.

Public Comment: Ken Kloc, Bay Area Environmental Health Collaborative, commended the Advisory Council on their work and requested the addition of some recommendations for stationary sources with particulate matter and micro environments, noting that CARB databases from 2005-2006 reports 187 Bay Area point sources that were reporting emissions greater than 2 tons per year of PM, and 118 facilities had greater than 5 tons per year. He did a GIS analysis of facilities that emit more than 5 tons and reported there are 34,500 people who live within 500 meters of the greater than 5 tons per year sources; 26,500 of those people live in West Oakland. Therefore, he said in areas close to point sources, the community is larger than West Oakland. Mr. Kloc then clarified statistics he had provided at the last meeting regarding Owens Brockway Glass Factory and Pacific Steel, stating that in 2005, the glass factory reported emissions of PM 10 of 94 tons per year. PM 2.5 totaled 52.8 tons per year for plant-wide emissions. A furnace reported PM 10 emissions of about 42 tons per year; two other furnaces have abatement on them, but one does not. In 2005, Pacific Steel reported emissions of PM 10 of 11.9 tons per year, and in 2006 it increased, reportedly at 27.9 tons per year.

Chairperson Brazil said the Advisory Council discussed the proposed revised draft report on the February 11, 2009 meeting with Air District staff and a subgroup has worked to finalize those recommendations.

Advisory Council members requested that staff identify all public speakers from the February 11, March 11, and April 8 meetings in the Final Report.

The Advisory Council discussed and made the following revisions for its final Recommendations Report, which will be presented to the Board of Directors at its April 15, 2009 meeting. All additions are reflected in **bolded underscore** and omissions are reflected as ~~strike-through~~s.

REVISED DRAFT REPORT ON THE FEBRUARY 11, 2009 ADVISORY COUNCIL MEETING ON AIR QUALITY AND PUBLIC HEALTH FOR DISCUSSION BY THE ADVISORY COUNCIL

SUMMARY

The following presentations were made at the February 11, 2009 Advisory Council Meeting on Air Quality and Public Health:

1. ***Community Air Risk Evaluation Program (CARE) Overview*** by Phil Martien, Ph.D., CARE Program Manager, Bay Area Air Quality Management District.
2. ***Public Health, Air Quality, & Equity*** by Dr. Anthony Iton. Dr. Iton is the Alameda County Health Officer. His primary interest is the health of disadvantaged populations and the contributions of race, class, wealth, education, geography, and employment to health status. He has asserted that the biggest single contributor to our country's vulnerability to bioterrorism is the lack of a universal system of health insurance for all Americans. Dr. Iton collaborated with California Newsreel in the creation of *Unnatural Causes ... Is Inequality Making Us Sick?* This is currently being shown on public television stations across the country.
3. ***Health Disparities in Contra Costa*** by Dr. Wendel Brunner. Dr. Brunner is the Director of Public Health for the Contra Costa County Health Services Department. Contra Costa has a population of over one million people with 18 cities in the San Francisco Bay Area. The Health Department has been working the City of Richmond to develop and implement a Health Element for the Richmond General Plan. Since he became public health director nearly 20 years ago, Dr. Brunner has stood boldly behind movements such as environmental justice, an effort to force government and industry to counter years of neglect suffered by poor minority neighborhoods.
4. ***Air Pollution Hot Spots: Unregulated Health and Environmental Justice Issues in the United States*** by Dr. Rajiv Bahtia. Since 1998, Dr. Bahtia has served as the Director of Occupational and Environmental Health for the City and County of San Francisco's Department of Public Health. Bhatia is also an Assistant Clinical Professor of Medicine at the University of California at San Francisco and teaches a course in the Health Impact Assessment of Public Policy at UC Berkeley.
5. ***Air Quality and Public Health Santa Clara County*** by Dr. Martin Fenstersheib. Dr. Fenstersheib has been the Health Officer for Santa Clara County since 1994. He has been active at the local, state and national levels in the area of disaster preparedness since 1997. Dr. Fenstersheib has made various presentations about pandemic influenza to various community groups and organizations. Dr. Fenstersheib is the VP of the Santa Clara County Medical Association and the Past President of the California Conference of Local Health Officials.

The speakers discussed health disparities related to air quality and potential mitigation measures in Alameda, Contra Costa, Santa Clara and San Francisco counties.

In addition, comments were taken from a number of members from the public:

February 11, 2009: Margaret Gordon, WOEIP; Sam Altshuler, former Advisory Council Member; Karen G. Pierce, Bayview Hunters Point Community Advocates; Wafaa Aborashed, Healthy 880 Communities; Marie Harrison, Green Action; and Linda Weiner, Bay Area Clean Air Task Force.

March 11, 2009: Ken Kloc, Bay Area Environmental Health Collaborative and Environmental Law and Justice Clinic

April 8, 2009: Ken Kloc, Bay Area Environmental Health Collaborative and Environmental Law and Justice Clinic

DISCUSSION MEETING

Due to the complex nature of the topic, Air Quality and Public Health, for the February 11, 2009 Advisory Council Meeting, the large number of new Council members and the implications for Air District policies and programs, the Advisory Council voted at its March 11, 2009 meeting to have *two* meetings to discuss the Air Quality and Public Health topic and prepare a report for the Air District Board of Directors. The two meetings were the originally scheduled March 11th meeting and a second meeting held on April 8th.

Five Advisory Council members, Sarah Martin-Anderson, Jenny Bard, Karen Licavoli-Farnkopf, Jane Martin, and Dorothy Vura-Weis prepared a draft report on the February 11, 2009 meeting on Air Quality and Public Health. At its March 11, 2009 meeting the Advisory Council reviewed and discussed the four presentations, materials received and the draft report on the February 11th meeting on Air Quality and Public Health. Council members suggested a number of revisions and edits to the draft report.

Based on Council members' suggestions, the five Council members listed above revised the original draft report and the *revised* draft report was included in the Agenda packet for the April 8th meeting. Council members discussed the *revised* draft report on Air Quality and Public Health at the April 8th meeting, finalized the recommendations, and completed the final report, including the following Key Points, Emerging Issues and Recommendations.

KEY POINTS – for discussion by Advisory Council

Based upon speakers, members of the public and Advisory Council discussion, below is a summary of the key points made by the Public Health Officers. These reflect themes common to the presentations, those that are especially relevant to the activities of the BAAQMD.

1. **Public Health Impact:** Ill health is **more** concentrated in low-income communities, **particularly those** of color. **Poverty, race, lack of political power, and air pollution**

have complex interactions that contribute to poor health and shortened life expectancy. Health and social inequities are positively correlated with exposure to sources of air pollution, such as freeways and industrial sources.

2. **Need for improved data:** Communities need to be armed with information and tools to protect public health. Air quality data is not presented in a form that is easily accessible or usable to either public health **staff** or the general public. This concern applies both to the content of the data (e.g., quantitative data, geographies represented) and the language (reading level) of the data presented. More detailed and localized data are needed to assist public health departments in assessing health impacts from air pollution sources. Data drives policy.
3. **Specific pollutant effects:** PM 2.5 has greater health impacts than ozone and toxic air contaminants (TACs). ~~10 times more than ozone and 20 times more than TACs in California.~~ Federal and State programs geared towards criteria pollutants address regional targets and do not identify hotspots. This represents an important gap in monitoring.
4. **Pollution sources: Transportation is the largest source of ozone precursors, particles, toxic air contaminants, and greenhouse gases. Measured trends in toxic air contaminants shows risk reduction, Bay Area average cancer risk is decreasing, but risk in some locations is high compared to average.** BAAQMD must be more proactive in regulating mobile sources of pollution within the legal constraints. Indirect Source Review is important for this reason. BAAQMD should recognize roadways as a source to be measured—**many of the speakers** ~~much of the data~~ made the connection between roadways and health outcomes in the bordering communities. Areas within 500 feet of roadways are generally the most impacted and there are reliable models of air dispersion to predict pollution accumulation.
5. **Involvement in Land Use Planning:** Integration of public health into land use decision-making is critical, but the financial constraints of Public Health Departments necessitate BAAQMD cooperation and guidance in this process. The Environmental Impact Report (EIR) process provides a mechanism for the air district to require mitigation of health impacts from land use planning. Don't limit what BAAQMD does, or what data it makes available, to what is within the regulatory jurisdiction.
6. **Leadership Role:** BAAQMD can foster greater improvement in public health, and in community relations, by expanding its leadership role beyond what it is legally required to do. If we have strong regional targets to reduce greenhouse gases (GHG), we get the co-benefits of reduction in all pollution.
7. **Public Health Approaches:** ~~BAAQMD's is a fellow health agency whose charge is to improve air quality in order to protect public health~~ **and therefore there is a strong theme of collaboration.** ~~There was a theme of collaboration.~~ Public health agencies have a strong relationship with the community and can facilitate linkages between BAAQMD and community groups. One of the ways to create change is to shift the ~~status quo imbalance of power (industry and policymakers vs. community)~~ **balance of power among industry, policymakers, and communities.** This Imbalance **of power** is a the

root cause of health inequity. **By partnering with public health agencies,** BAAQMD can play an important role in helping communities advocate for themselves.

8. Cumulative Impacts Approach: A cumulative impacts approach recognizes that criteria air pollutant sources may also produce localized hot-spots in some neighborhoods, similar to toxic air contaminant sources, and that some criteria air pollutant sources may need additional controls to protect people on smaller geographic scale than on an urban scale or regionally. The Bay Area Air Quality Management District has already recognized the need for a cumulative impacts approach by adopting Resolution 2008-10. New rules are needed to address current gaps in monitoring and health risk assessment.

EMERGING ISSUES – for discussion by Advisory Council

1. Health disparities and the relationship to cumulative impacts.
2. Noise pollution has negative health impacts, and is often present in the same locations as other pollutants.
3. Roadways are currently unregulated sources, falling outside the focus of both BAAQMD and CARB.
4. The use of Health Impacts Assessments is a promising part of the Environmental Review process.
5. The study of the health impacts of fine PM is a growing field in environmental health research.

RECOMMENDATIONS—for discussion by Advisory Council

The Health Advisory Council recommendations are based on the presentations by the four health officers on February 11th and subsequent discussion among the Advisory Council members. Their purpose is to advance the core mission of the Bay Area Air Quality Management District of "achieving clean air to protect the public's health and the environment," and to address the fact that some communities, usually low income communities and communities of color, that often have limited political power, bear a disproportionate burden of air pollution and its negative health effects.

1. Reducing health impacts from air pollution

Take all steps necessary to close gaps in monitoring programs to address cumulative impacts and "hot spot" areas, and emphasize actions that produce immediate risk reduction, including:

- Integrate consideration of both fine and coarse PM into all Air District programs, including the CARE Program, and establish PM fine and PM coarse health-based action levels for permitting.
- Review current rules to identify potential gaps in permitting related to the establishment of PM action levels noted above, including non major sources.
- Develop additional new source and existing source rules using a cumulative impacts approach to limiting health risk at the geographic scale of one or several city blocks.
- Conduct additional studies along freeway corridors and in areas impacted by multiple pollution sources, including localized saturation monitoring studies such as the CARE Program West Oakland Measurement Study.

- Require “hot spot” analysis of regional projects (roadway expansion), **and/or coordinate with transportation project sponsors who may be responsible to conduct “hot spot” analysis.**
- Implement expanded air quality modeling beyond identified toxic hot spots (to include **near roadway** micro areas).
- Develop an indirect source inventory for the Bay Area that identifies both small and large indirect sources of air pollution.

2. Public Outreach and Community Collaboration

- Present air pollution data in simple, understandable language and format and make it easily available to community stakeholders.
- Work with local Public Health Departments to engage community residents on air pollution issues, and use participatory methods, like the CARE Program West Oakland On-road Diesel Truck Survey, to better assess localized impact.
- Conduct a review of the effectiveness of current community outreach efforts at the Air District and develop an outreach program based on best practices.
- Develop land use best practices for local planning agencies to reduce air pollution and greenhouse gases and increase technical assistance on methods for Environmental Impact Review processes, hot spot analyses, and mitigation strategies.
- Add a Health Officer position to the BAAQMD staff, similar to the position at the South Coast AQMD. The Health Officer could provide guidance on decision making, act as a community liaison, monitor health outcomes related to air quality, and assist local governments with land use planning strategies that reduce air pollution and greenhouse gases **emissions.**

3. ~~Legislation, Regulation and Policy~~, ~~Regulatory and Policy~~

The Air District should **continue to** take a leadership role in advocating for strong regulations and aggressive enforcement, in addition to supporting legislation to protect **overburdened** ~~impacted~~ communities:

- Increase enforcement and be more aggressive in requiring pollution reduction plans from major polluters, such as ports, facilities, and in monitoring implementation of those plans in highly polluted areas.
- Establish more stringent requirements for large and small point sources in **impacted/overburdened** communities, including grandfathered sources.
- Implement Indirect Source Rules (ISR) in order to ensure protection for overburdened communities and incorporate them in updated CEQA guidelines.
- Support strong regional greenhouse gas reduction targets through the AB 32 and SB 375 implementation process, to maximize air quality co-benefits.
- Support implementation of Container Fees at Ports to pay for air pollution mitigation and public health programs and support the upcoming Lowenthal bill.
- Investigate other strategies to fund emissions reductions and **increase public transit service**, such as gas taxes, increased vehicle license fees, and incentive programs, and support legislation to implement those strategies.
- **Investigate what limits the agency’s current legislation ability to regulate mobile sources, and propose changes to the law to increase our efforts in this area.**

Summary by Advisory Council:

Chair Brazil requested the subgroup take information from the amended report, develop a PowerPoint document for presentation to the Board, and email the report to staff. Chair Brazil also asked the subgroup to determine who would be attending and presenting the Final Report to the Board and requested that a copy of the Presentations from the February 11, 2009 meeting be available at that meeting.

Council Action: Dr. Holtzclaw made a motion to approve the Report and Recommendations of the Advisory Council, as amended; seconded by Mr. Huang; unanimously approved without objection.

OTHER BUSINESS:

Council Member Comments/Other Business - None

Time and Place of Next Meeting: 9:00 a.m. Wednesday, May 13, 2009, 939 Ellis Street, San Francisco, CA 94109

Adjournment: The meeting adjourned at 12:27 p.m.

Lisa Harper
Clerk of the Boards