



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ADVISORY COUNCIL REGULAR MEETING

THURSDAY
MAY 15, 2008
9:00 A.M.

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

AGENDA

CALL TO ORDER

Opening Comments
Roll Call

Louise Bedsworth, 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.

CONSENT CALENDAR

1. Approval of Minutes of March 12, 2008

COMMITTEE REPORTS

2. Technical Committee Meeting of April 7, 2008
Kraig Kurucz, Chair
3. Public Health Committee Meeting of April 9, 2008
Brian Zamora, Acting Chair
4. Air Quality Planning Committee Meeting of April 10, 2008
Emily Drennen, Chair

PRESENTATION

5. Presentation on Multiscale and Multipollutant Modeling Research and Its Applications to Address Human Health and Ecosystem Issues
S. T. Rau, Ph.D.

Dr. Rau, Director, Atmospheric Modeling Division, National Exposure Research Laboratory, U.S. Environmental Protection Agency will provide an overview of the Community Multiscale Air Quality (CMAQ) modeling system and discuss its applications with regard to the effects of climate change on air quality and the relationships between air quality and human/ecosystem health.

AIR DISTRICT OVERVIEW

6. Report of the Executive Officer/APCO

Jack P. Broadbent

Mr. Broadbent will provide an update on pending and planned Air District activities, policies and initiatives.

OTHER BUSINESS

7. 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.

8. Time and Place of Next Meeting

10:00 a.m., Wednesday, July 9, 2008, 939 Ellis Street, San Francisco, CA 94109.

9. Adjournment

/jmm

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.

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

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

MAY 2008

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Personnel Committee <i>(At the Call of the Chair)</i> CANCELLED	Friday	2	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Public Outreach Committee <i>(Meets 1st Thursday every other Month)</i>	Monday	5	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	7	9:45 a.m.	Board Room
Board of Directors Executive Committee <i>(Meets At the Call of the Chair)</i>	Monday	12	9:30 a.m.	4 th Floor Conf. Room
Advisory Council Regular Meeting <i>(Meets 2nd Wednesday of every odd Month) – RESCHEDULED TO THURSDAY, MAY 15, 2008</i>	Wednesday	14	10:00 a.m.	Board Room
Board of Directors Mobile Source Committee – <i>(Meets 4th Thursday of each Month)</i>	Wednesday	14	9:30 a.m.	4 th Floor Conf. Room
Advisory Council Regular Meeting <i>(Meets 2nd Wednesday of every odd Month)</i>	Thursday	15	9:00 a.m.	Board Room
Advisory Council Executive Committee <i>(Meets 2nd Wednesday of every odd Month)</i>	Thursday	15	Immediately Following the Advisory Council Regular Meeting	Room 716
Board of Directors Climate Protection Committee <i>(Meets 3rd Thursday every other Month)</i> - TO BE RESCHEDULED	Thursday	15	9:30 a.m.	4 th Floor Conf. Room
Joint Policy Committee	Friday	16	10:00 a.m. – 12:00 p.m.	MTC 101 - 8 th Street Oakland, CA 94607
Board of Directors Stationary Source Committee <i>(Meets 3rd Monday Quarterly)</i>	Monday	19	9:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	21	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee – <i>(Meets 4th Thursday of each Month)</i> RESCHEDULED TO WEDNESDAY, MAY 14, 2008	Thursday	22	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday of each month)</i>	Wednesday	28	9:30 a.m.	4 th Floor Conf. Room

JUNE 2008

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Technical Committee <i>(Meets 1st Monday of every even Month)</i>	Monday	2	9:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	4	9:45 a.m.	Board Room
Advisory Council Public Health Committee <i>(Meets 2nd Wednesday of every even Month)</i>	Wednesday	4	1:30 p.m.	Room 716
Advisory Council Air Quality Planning Committee <i>(Meets 1st Thursday of every even Month)</i>	Thursday	5	9:30 a.m.	Room 716
Board of Directors Executive Committee <i>(Meets At the Call of the Chair)</i>	Wednesday	11	10:00 a.m.	4 th Floor Conf. Room
Board of Directors Climate Protection Committee <i>(Meets 3rd Thursday every other Month)</i>	Thursday	12	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets 3rd Monday quarterly)</i> – RESCHEDULED TO MAY 19, 2008	Monday	16	9:30 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	18	9:45 a.m.	Board Room
Board of Directors Legislative Committee <i>(Meets 4th Monday of every Month)</i>	Monday	23	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday of each month)</i>	Wednesday	25	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee – <i>(Meets 4th Thursday of each Month)</i>	Thursday	26	9:30 a.m.	4 th Floor Conf. Room

JULY 2008

<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	2	9:45 a.m.	Board Room
Board of Directors Public Outreach Committee <i>(Meets 1st Thursday every other Month)</i>	Thursday	3	9:30 a.m.	4 th Floor Conf. Room
Advisory Council Executive Committee <i>(Meets 2nd Wednesday of every odd Month)</i>	Wednesday	9	9:00 a.m.	Room 716
Advisory Council Regular Meeting <i>(Meets 2nd Wednesday of every odd Month)</i>	Wednesday	9	10:00 a.m.	Board Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
Board of Directors Climate Protection Committee <i>(Meets 3rd Thursday every other Month)</i>	Thursday	17	9:30 a.m.	4 th Floor Conf. Room

JULY 2008

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Joint Policy Committee	Friday	18	10:00 a.m. – 12:00 p.m.	MTC 101 - 8 th Street Oakland, CA 94607
Board of Directors Budget & Finance Committee <i>(Meets 4th Wednesday of each month)</i>	Wednesday	23	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee <i>– (Meets 4th Thursday of each Month)</i>	Thursday	24	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Legislative Committee <i>(Meets 4th Monday of the Month)</i>	Monday	28	9:30 a.m.	4 th Floor Conf. Room

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4/29/08 (10:40 a.m.)
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Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
(415) 749-5000

DRAFT MINUTES

Advisory Council Regular Meeting
10:00 a.m., Wednesday, March 12, 2008

CALL TO ORDER

Opening Comment: Chairperson Bedsworth called the meeting to order at 10:02 a.m.

Roll Call: Louise Bedsworth, Ph.D., Chairperson, Sam Altshuler, Robert Bornstein, Ph.D., Harold Brazil, Jeffrey Bramlett, Irvin Dawid, Emily Drennen, MPA, William Hanna, John Holtzclaw, Ph.D., Robert T.P. Huang, Ph.D., Janice Kim, M.D., and Karen Licavoli-Farnkopf (10:06 a.m.), MPH., Linda Weiner, and Brian Zamora.

Absent: Cassandra Adams, Ken Blonski, Fred Glueck, Steven Kmucha, M.D., and Kraig Kurucz.

PUBLIC COMMENT PERIOD: There was none.

CONSENT CALENDAR:

1. **Approval of Minutes of January 9, 2008:** Mr. Zamora moved approval of the minutes, Dr. Holtzclaw seconded the motion with minor edits; the minutes carried unanimously.

COMMITTEE REPORTS:

2. **Air Quality Planning Committee Meeting of February 7, 2008**

Emily Drennen, Chair

Ms. Drennen reported on the Regional Transportation Plan (RTP) 2035 presentation given by Metropolitan Transportation Commission (MTC) staff members, Ray Kan and Harold Brazil, stating the RTP's brief timeframe:

- Vision policy strategies adopted Mid-March
- Call For Projects to all Bay Area participating agencies March 5th
- MTC hopes to adopt preliminary financially-constrained investment plan July
- RTP to be adopted February of next year.

Goals for the RTP were reported as:

- 10% reduction in VMT from present totals
- Reductions in particulate matter (PM):
 - 10% goal for PM_{2.5}
 - 40% goal for PM₁₀

Ms. Drennen stated that three areas were looked at, i.e., Economy, Equity and Environment, and best case scenarios were considered. The MTC is examining three basic investment scenarios:

1. Increasing highway efficiency through metering lights, et al.
2. Increase funding for High Occupancy Toll (HOT) lanes and for increasing regional and local bus service.
3. A Regional Rail and Ferry investment scenario.

It was noted that the best scenarios were still 25% over the target for $PM_{2.5}$, 120% over target for PM_{10} , and 80% over the target for CO_2 . Ms. Drennen stated that an integrated strategy between all three of those areas with interesting pricing strategies on gasoline and driving would be needed in the near term. Ms. Drennen further remarked that a drastic increase in the cost of driving would be needed to influence behavior, change in land use patterns in the longer term, changing attitudes and behaviors regarding transportation, and investigating how technology is going to help with what was being considered by the MTC.

Ms. Drennen concluded the report with related potential next steps for the Committee:

- Examination of congestion driving fees in other areas—specifically:
 - how transit is funded
 - equity issues arising from fees
- Development of policy on this to present to the Advisory Council

Mr. Altshuler remarked that concerns regarding PM have changed since the 1980s, and encouraged everyone to look toward PM_1 and PM_{10} in future planning, and not confine themselves to something like PM_{10} .

Mr. Dawid commented that MTC is discussing increasing the cost of driving by five times, and expressed concern about whether and how the High Occupancy Toll plan would be implemented.

3. Technical Committee Meeting of February 11, 2008

Dr. Louise Bedsworth

Dr. Bedsworth reported that the Committee had discussed the following issues:

- PM inventory development
- Modeling issues
- Wood smoke
- Estimates of the wood smoke contributions to the PM inventory

She projected that the next meeting would include a look at climate change and criteria air pollutant issues interaction, and that Rob Harley will likely come to speak about modeling future air quality under climate change scenarios.

With regard to single models involving toxics, criteria air pollutants, and greenhouse gases, Dr. Bedsworth asked Dr. Bornstein to talk about the possibility of an expert speaker to address the Advisory Council on the topic in May. Dr. Bornstein replied that S. T. Rao, in charge of modeling for the EPA at Research Triangle Park, developed all of the models that the District uses and he would be coming to the area late on May 14th, and available from 9:00 to 10:30 a.m. on the 15th. Dr. Bedsworth agreed to work with Ms. Goodley to poll on rescheduling the next Advisory Council meeting.

Dr. Bornstein reported that Phil Duffy who works on climate change evaluation for California at Lawrence Livermore was also willing to come speak, and suggested Mr. Duffy and Mr. Harley speak together. Dr. Bedsworth suggested Committee Chairperson Kurucz could be consulted to arrange this.

4. Public Health Committee Meeting of February 13, 2008

Janice Kim, Chair

Dr. Kim reported the Committee reviewed and approved the final draft strategy for the resolution on asthma and indoor air quality, and was working with the Air District staff to get their final thoughts on the resolution, and expressed that it should be ready for presentation at the next full Advisory Council meeting in May. Dr. Kim continued that an excellent presentation was given by Air District staff member Janet Glasgow as an update on the proposed regulation of wood burning devices, and noted that a full presentation on the topic by Kelly Wee and Eric Pop would follow the Committee reports. In conclusion, Dr. Kim stated the Committee anticipated the CARE program would be the main project for the rest of the year, noting that Air District staff would present on the CARE Project and the Air Resources Board's West Oakland Health Risk Assessment at the Committee's next meeting.

Mr. Altshuler commented on an editorial on the front page of the Sunday Chronicle that said asthma rates are going up in spite of air pollution going down, and added that perhaps there are some non-air quality issues affecting the incidences of asthma going around. Discussion ensued on various factors affecting asthma.

PRESENTATION

5. Presentation and Overview of Air District's Proposed Regulation 6, Rule 3: Wood-burning Devices

Kelly Wee

Kelly Wee, Director of Compliance and Enforcement, presented Regulation 6, Rule 3 background and history to new Advisory Council members and updated the members on other Air District rules regarding wood burning. Eric Pop, Air Quality Specialist, gave an overview of the Draft Regulation 6, Rule 3.

Commencing his presentation, Mr. Wee recounted that in December 2006 the EPA lowered the national ambient 24-hour air quality standard for fine particulate PM_{2.5}—PM smaller than 2.5 microns, i.e., approximately 1/70th the size of a human hair—a very small particle and a significant health concern. It was lowered from 60 to 35 micrograms per meter cubed. Based on 24-hour averages in a 7-8 year history, the Air District exceeds that standard on average 20 to 30 days per year. A complex analysis revealed that the largest contributor to fine PM is wood smoke; therefore, the Air District is moving forward with a wood smoke regulation.

Mr. Wee stated that Air District staff concluded that fine PM in the Bay Area has demonstrated characteristics of a regional pollutant. Using complex chemical mass balance (CMB), carbon 14 (C-14) dating, some speciation, and combining that with inventory data to break it down into components or contributors to fine PM at San Jose (the highest PM location), it was determined that wood smoke represents about one third of the PM_{2.5} on peak nights during winter—even with the voluntary curtailment program, i.e., asking people not to burn on Spare the Air Tonight, wood smoke still amounts to one third.

Dr. Bornstein inquired whether this was based on observations of the particles or knowledge of the emissions, to which Mr. Wee replied, it is primarily both. Additionally, Mr. Wee continued, it is based on filter catches; chemical analysis of organic carbon versus elemental carbon, and a chemical mass balance analysis, some carbon 14 dating, and then in some areas the inventory is used to tease out some of these categories. Dr. Bornstein remarked that the District and he were going to do a study for the San Jose Airport to look at the signatures from it, because the people from around the airport said they were being affected. Dr. Bornstein noted with interest that one of the presentation's graphs showed aircraft as three times larger than marine, and asked how the aircraft signal was found. Henry Hilken, Director of Planning, Rules, and Research, responded that it is based on the source profile of the emission. Mr. Wee clarified that marine was not marine combustion emissions; it was sea salt, not shipboard. Shipboard would be included in off-road, as 20 percent. Mr. Dawid asked whether on-road and off-road were both transportation emissions being discussed. Mr. Wee responded that off-road could be marine or construction equipment, and provided a breakdown of the terms: if DMV issues a registration license, it would be on-road; if not, then it would be in the other realm and could include heavy duty diesels, at construction sites, etc.

In response to a question from Mr. Hanna on how wood smoke contribution compares on an average winter night to the peak in terms of its percentage, Mr. Hilken declared that it would be 20-25%. Mr. Wee explained that it could be a little bit less, because patterns for high PM typically show three consecutive days without rain, light easterly winds less than 5mph, and cooler temperatures, during which you tend to see higher emissions from wood. An average day would be expected to be less.

Mr. Wee related that the Air District's information on contributors to PM_{2.5}, had been developed through an analysis of filter catches and knowledge of emission inventory. Some additional information was derived from random telephone surveys of the residents contributing to this wood smoke signature. Regarding the different types of wood-burning devices and how they are contributing to the overall PM loading, Mr. Wee reported the following:

- Fireplaces are the highest emitters
- Non-certified wood stoves at four percent of the inventory
- Certified stoves, another four percent
- Pellet stoves are estimated at one percent of the inventory

Mr. Wee provided a photographic comparison of a control filter catch and an exposed one at the Concord station, in service for 24 hours, on Christmas Day of December 2006. Dr. Bornstein asked about the weight of the material on the exposed filter. Mr. Wee replied that it was 62.2 mcg per cubic meter for Concord. Dr. Bornstein asked whether a typical value would be several grams or several tenths of a gram. Mr. Hilken responded that it would be less than that, a very small amount.

Mr. Oku asked the number of monitors there were. Gary Kendall, Director of Technical Services, replied that there were ten. Mr. Wee continued, explaining that use of BAMs, or beta attenuation monitors, is the federal reference method from which they base the standard. Mr. Wee further explained that the Air District has BAMs which allow monitoring of hourly concentrations, which had not yet been approved as a federal test method, but noted they are helpful in planning.

Mr. Wee continued with an EPA chart entitled "PM Pyramid of Effects", representing the population proportionally affected by particular health effects: the particulate matter (PM) at the pyramid's bottom showed minor health effects that affected a wider proportion of the public; at the tip were

death and premature death, affecting a smaller proportion. This was behind the EPA establishing new ambient air quality standards for PM.

In response to a question from Dr. Bedsworth about the source of ammonium nitrate, Mr. Wee replied that ammonium nitrate and ammonium sulfate are secondary PM; that with fine PM you have both primary-emitted PM, like wood smoke, and secondary PM, which forms in the atmosphere from other precursors, and so ammonium nitrate comes from nitric acid and ammonia interacting together to form ammonium nitrate; nitric acid comes from NO_x .

In response to a question from Dr. Bedsworth, a discussion ensued regarding the constitution and combustion of fossil fuel. Dr. Bornstein inquired about types of monitoring stations, and Mr. Wee responded that by definition, the NAMS—National Air Monitoring Stations—must represent population areas and cannot be source-affected. Mr. Kendall added that the network has to conform to EPA monitoring of the environment, but that the stations are not all the same, and further noted that there have been tremendous reductions in criteria pollutants in the emissions inventory since 1998. Dr. Kim commented about ultrafine particles, and discussion thereof ensued. Dr. Huang asked whether the number of monitors would have an effect on the data. Mr. Wee replied that he did not think that it would alter the data significantly, but noted that it was a special study for the San Jose site; this speciation was not available for every monitoring site. There followed some additional discussion of monitoring sites.

In response to a question from Dr. Holtzclaw about whether the source of the ammonium nitrate was possibly fertilizers, Mr. Wee stated the ammonia component was the natural component in the environment from decomposition of NO_x . Mr. Kendall expanded on the topic, adding that volatile organic compounds (VOCs) and NO_x react in the atmosphere to form ozone during the summer; however, in the winter, the same chemical processes that convert NO_x to NO_2 , for example, actually convert some of the NO_x to nitric acid.

Mr. Wee continued with a graph representing high-PM events from early December of 2007, noting a carryover or buildup effect had led to a conclusion that there was a regional aspect to $\text{PM}_{2.5}$ and that fine particulate tends to stay airborne for a longer time.

The graph that followed depicted 48-hour versus trajectory modeling, done by the Research Department, indicating movement of PM affected by winds. Mr. Wee gave another example that involved wood smoke emissions that occur in Sonoma and Napa Counties, move around the Bay Area and contribute to PM levels elsewhere over a longer scale of time. Thereafter Mr. Wee provided a Bay Area wood smoke inventory, which included the number of households and wood-burning devices, wood smoke percentage of peak $\text{PM}_{2.5}$, and types of contributors.

Mr. Wee continued with some Advisory Council history: in 2006, the Public Health Committee asked the Air District to help examine the experiences of other Air Districts. San Joaquin Valley, Puget Sound, and other Air Districts were looked at, and a set of recommendations was made to the District's Board of Directors to address fine PM over multiple years. An update was given on what these Districts were doing, noting that the Puget Sound Clean Air Agency had been working on PM the longest amount of time, with a curtailment provision in their rule and citations for burning on no-burn nights. San Joaquin Valley made some progress from citations they issued last year, and phased in their program over multiple years. Sacramento Metropolitan Air Quality Management District adopted a multiple-stage curtailment program last October, and last week South Coast adopted a rule

with very similar elements to the Air District's, except that their curtailment program is not set to be implemented until 2011 and only if necessary to meet the standards and only in specific areas. There followed a discussion, led by Mr. Dawid, of the South Coast's prohibition of new wood-burning devices in new building.

Mr. Wee spoke about the outreach component of the wood smoke strategy as well as a cleaner burning technologies incentives program, and introduced his colleague Eric Pop, Air Quality Specialist, to speak about the proposed regulation rule.

Mr. Pop outlined components of the proposed rule:

- Curtailment, i.e., no burning in any wood-burning device, will be required when airborne PM gets to unsafe levels. The focus of this standard is to require residents of the Bay Area to refrain from burning during these critical nights. The forecast for a no-burn day would be made that morning, based upon meteorological and monitoring station data. Two exceptions to the no-burn rule exist:
 - The sole source of heat exemption
 - Where natural gas is not available
- The second standard is visible emission limitations. This will require that people burn cleanly, i.e., hot fires with sufficient air to produce less PM.
- Thirdly, a device sale provision; as of now there are four devices approved for sale in the Bay Area. They are:
 - a. EPA Phase II devices
 - b. Pellet stoves
 - c. Masonry heaters
 - d. Zero-clearance fireplaces

The EPA is presently developing a test method for target emissions for these devices. This requirement, if the method is developed in time, will allow for approval of these devices, at the Air Pollution Control Officer's (APCO's) discretion per device.

- The fourth standard would be applied to new construction. (Discussion of South Coast regulations versus the proposed rule ensued.)
- In discussing a provision for prohibition on burning garbage, Mr. Pop listed the ancillary inappropriate materials included therein:
 - chemically treated wood
 - non-seasoned wood
 - new or used wood pallets
 - plastic and rubber products
 - petroleum products
 - paints and paint solvents
 - particle boards
 - materials not intended for use in a wood-burning device
- The last standard of the proposed rule is the seasoned wood and solid fuel labeling requirement that all wood sold must have a label affixed to the package, indicating that it has a moisture

content of 20%, or less, by weight and a label notifying consumers of how to find out when there is a curtailment on burning the product.

Mr. Pop reported on seven previously-held Bay Area workshops, media responses, and phone traffic. Concerns and comments were outlined as follows:

- People frustrated they wouldn't be able to use EPA-certified devices, which they spent several thousand dollars to upgrade to, during curtailment nights
- Cleaner devices should be encouraged in the regulation (as exemptions to curtailment)
- Consideration of smaller curtailment zones
- Need for clarification of the sole-source-of-heat exemption
- Exemption for low-income—Pop explained that there is no low-income exemption in this proposed rule because what is wanted is, not more pollution in low-income areas but, to reduce pollution across the board
- A well-defined threshold for curtailment
- Enforcement of the rule
- Provision of public outreach with specific information regarding curtailment
- Cost of labeling requirement—this from representatives of the manufactured log industry
- Constitutionality of curtailment

The Air District will continue to evaluate comments and incorporate them, when appropriate, into the next final draft of this proposed regulation.

Mr. Pop concluded with next steps: completion of the environmental impact review (EIR), a public hearing of the proposed regulation during the summer of this year, and nine public informational meetings throughout the Bay Area within the next three weeks to explain the Rule, the proposed Regulation, to address comments, to discuss how it will be enforced, and reiterate public health concerns.

Mr. Altshuler congratulated the two speakers on an excellent job, handed out his own draft resolution for Advisory Council consideration, and opened discussion on wood as a renewable fuel. As a point of order, it was confirmed by Mr. Bunger, Air District Counsel, that Mr. Altshuler's draft resolution would need to be amended, according to the 72-hour rule. Mr. Wee addressed the greenhouse gas issue, saying that, while the International Plant Protection Convention (IPPC) does say that wood is zero, many people do not agree with that. A complete EIR is being done, to address any potential climate change issues, with the aspects of this rule.

Ms. Weiner thanked the presenters and the Air District, and inquired about landlord responsibility, with regard to low-income tenants. Mr. Wee explained that in an average winter, there are 20 or 30 where curtailment would be called. To shift from wood to natural gas, costs approximately \$2 per day; and with a maximum 30 nights per year, totaling only \$60 over a winter in additional costs to comply with the rule. That issue will be taken up as part of the socio-economic impact analysis for the rule, which will occur a bit farther along in the process.

Jack Broadbent, Executive Officer/Air Pollution Control Officer, added to Mr. Wee's remarks about the financial aspects by stating that, regardless of financial need, no one has the right to pollute their neighborhood or impair the health of their neighbors. In response to a question from Ms. Weiner about financial incentives to help, Mr. Broadbent replied that there would still be a financial

incentives package and program to offset the cost of putting in natural gas inserts, etc., and that where there is no source of heat other than wood burning in the home, there is an exemption developed into the rule.

Ms. Drennen raised the possibility of sending Mr. Altshuler's resolution to the Public Health Committee for a review and return to the full Council. In terms of legality, Ms. Drennen wondered if it would be to the Advisory Council's benefit to change agenda items to be information/action, in case someone comes up with a proposal like Mr. Altshuler's. Mr. Bunger replied that the only way to do that is to know what the proposal is in advance of the meeting, noting it can not come from the dais, unless it is proposed 72-hours in advance of the meeting per meeting agenda obligation.

Ms. Drennen asked whether subsidies were for change-outs only, or could new products be installed, where there hadn't been any. Mr. Wee replied that the subsidy is only for older, dirtier technology, i.e., either eliminating a fireplace, or eliminating an older, dirtier wood stove, or woodstove insert.

Mr. Broadbent cautioned the Council not to look necessarily at what South Coast does and think that it ought to be applied here. Having worked there for fifteen years and lived in Southern California for 25 years, Mr. Broadbent said he had *never* burned any wood in his fireplaces in Southern California, including in the mountain region. It is a very different lifestyle in Southern California, and particularly in this particular area, in terms of wood smoke. Mr. Broadbent mentioned that it is very easy for the South Coast to prohibit fireplaces because they are not used much, and noted that the relative contribution of wood smoke to PM_{2.5} is different in the Bay Area and Northern California as a whole, and added that the differences had been talked about at CAPCOA—the air pollution officer's association—quite a bit.

Mr. Hanna inquired whether concern from the rural hillsides about burning seasoned and dried wood that had been cleared for wildfire prevention had been addressed in the EIR. Mr. Hanna further noted that, in addition to energy efficiency considerations, the cleared wood would need to be dealt with anyway. Mr. Wee replied that that was true, and the reason why Napa County, in particular, has been very progressive with their Firewise program. The Air District has partnered with Napa County to help them develop this Firewise program; basically a free chipping service. People can do the setback or clear space requirements and then call the program; they will come and chip it at no cost. The Air District would prefer to see any pieces that are too big to chip properly seasoned and dried before they are burned. Mr. Altshuler commented that collection of forest debris for use in power plants would be ideal, in that chipped wood or wood that is left to decay in the forest puts out CO₂ regardless, and if energy could be extracted, and the use of the carbon or fossil fuel offset, it would all be for the better—provided it stay within the air quality constraint.

Mr. Brazil thanked the speakers asked if the Air District had done any modeling to see if it would meet the standard with the regulation in place. Mr. Wee replied that modeling for fine PM is just in its infancy with approved models and just starting to get runs, so the short answer, is no because the modeling isn't quite there yet. Mr. Bramlett complimented and thanked staff, noting the presentations had improved each time, and that there had been a tremendous amount of great work done very expeditiously.

Public Comment

John Crouch, with the Hearth Patio & Barbecue Association, asked whether slide number four had speciated values from the old Desert Research Institute, San Jose, 4th Street work. Staff responded that it was not based on the Bay Area PM₁₀ study, commenting that it was made more than ten years ago. Mr. Crouch asked if “we’ve slipped from pretty solid science into asking people over the phone what they have and how much they burn.” Mr. Wee responded that the analysis as a whole was a combination of values measured on a filter, laboratory analysis of those elements, and use of the emission inventory. Slide 5 breaks these down, using results of three thousand respondents’ telephone surveys to get a distribution for the types of devices in the Bay Area, and how many are burning on any particular night. Mr. Crouch felt that asking people what they have, and then making policy on it is a really difficult issue; that it is possible that people weren’t accurate in their responses. Mr. Crouch then asked how the speciated data in slide 8 was adjusted. Mr. Wee replied that “Other Wood Burning” and “Residential Wood Burning” are done by inventory. Mr. Crouch continued with the following observations and comments:

- Downtown San Jose monitors showed the most wood smoke
- This reinforces the concept that there is a lot of transport here.
- Slide 10 back-trajectory reinforces that what started in Concord, got back to Concord, and a no-burn that affected the whole District would not have affected this particular back-trajectory.
- He would be interested to see the case for regional pollutant made in the SIP, as EPA had never signed off on that concept in any PM₁₀ SIP.

Mr. Broadbent noted that typically the EPA mandates implementation of the rule across the entire non-attainment area. Mr. Crouch replied that it was interesting that in their December letter the California Air Resources Board (CARB) proposed just Marysville and just Yuba City; because they made the argument that it was a very localized event. Mr. Broadbent expressed doubt that the EPA would agree to that.

Mr. Crouch opined that the idea that it is transport—that it is not a neighborhood scale for wood smoke—would affect all of the PM_{2.5} SIPs. Mr. Crouch went on to commend Puget Sound Air Agency policies, and comment on differences between the Air District and other Air Districts in California in terms of opacity regulation, fireplaces and gas fireplaces in new building, elevation cut points, and wood-burning devices where gas service is not available; he wanted finally to emphasize that there are differences between the Air Districts’ ordinances, and those differences are appropriate.

Mr. Wee provided the timeline for the regulation rule: presentation of the rule changes, in response to the first set of public comments, to the Board of Directors Stationary Source Committee on Monday, March 17; scheduling the informational meetings for the second week of April through April; final adoption in June.

Mr. Dawid commented that, out of 1.2 million woodburning devices, 1.1 are fireplaces, and expressed concern that the Air District is devising regulations for a very small minority of stoves and pellet stoves, when fireplaces are the main contributors to wood smoke. Mr. Wee replied that it is necessary to look at the loading that is occurring to the basin. Knowing it is one third of the PM on peak evenings, it is necessary to hypothesize what would happen if there was 100% compliance with mandatory curtailment. With a voluntary program it is only in the mid-teens/high-teens. As Director of Compliance and Enforcement, Mr. Wee said he had had a long history of enforcing a lot of

stationary source regulation, emphasizing the challenge of getting public habits to change and estimating it would be a multi-year effort. Although the signature is going to decrease a lot over time, there will probably never be 100% compliance.

Jack Colbourn, Director of Administration, introduced new staff member Michael Neward, Administrative Analyst, and noted that Mr. Neward is the person in charge of the Wood Smoke Rebate.

AIR DISTRICT OVERVIEW

6. Report of the Executive Officer/APCO

Jack P. Broadbent

Mr. Broadbent provided an update on pending and planned Air District activities, policies and initiatives.

Mr. Broadbent opened with an overview of Air District activities, stating that the budget cycle is sound and stable, and that the state's budget crisis would not affect the Air District. Challenges continue to be met, and resources are sufficient for initiatives. At this time it does not make sense to add to staff, however grant and accounting staff are needed to administer programs. There have been proposed fee increases for cost recovery of the Air District. Mr. Broadbent stated that out of \$250 million over four years, the Air District will receive a total of \$35 million in I-Bond funding. CARB-MTC will likely distribute funds totaling \$143 million dollars (without fees, plus 60 million).

Mr. Broadbent reviewed the following Air District activities:

- Community Air Risk Evaluation (CARE) is identifying health risks from diesel particulate matter in six communities, mapping Richmond, Concord, East and West Oakland, and East San Francisco in confluence with the freeway in San Jose—continues to look at stationary source and target dollars in these communities.
- Green Ports Initiative - focusing on ports and implementing measures for:
 - Oakland
 - San Francisco
 - Redwood City
 - Benicia, and
 - Richmond
- Wood Smoke Rule (Regulation 6, Rule 3: Wood-burning Devices) - discussed previously
- Spare The Air Campaign – 2 free transit days this summer, reaching the end of the funding cycle, including free transit
- Climate Protection
 - Support CARB
 - local governments
 - non-professionals
 - Grant Program \$3 million
 - Emissions inventory – look to moving forward on CEQA guidelines
- Greenhouse gas fee on (other sources), CO₂, and methane – press attention for climate protection, CO₂ fee needs integration instead of duplication

OTHER BUSINESS

7. Report of the Chair Dr. Louise Bedsworth

Nothing was reported.

8. Council Member Comments/Other Business:

Chairperson Bedsworth opened the floor for comments.

Ms. Drennen commented that transportation and planning experts should be included in new full-time employee considerations.

Mr. Broadbent made some clarifying comments on updating CEQA Guidelines.

Ms. Drennen expressed concern about the reduction in free transit this year, and asked if branding items (“schwag”) could be cut in favor of more free transit days. Mr. Broadbent replied that the Air District is changing advertising to more cost-efficient public information, and noted that efforts were being redoubled to obtain private funding.

Dr. Bedsworth asked for discussion about the possibility of hiring a Public Health Officer. Mr. Broadbent responded that a contracted Public Health Officer was budgeted for, to assess the need to engage with the public, and that the budget for this is \$50,000.

Mr. Dawid commented that the Advisory Council did not see the greenhouse gas fee, and inquired about CARB’s AB32 (Global Warming Solutions Act of 2006) domain. Mr. Broadbent responded that the Advisory Council does not see everything, and commented on the advisory role of the Council, and also mentioning that there was no sole domain for the fees. Mr. Bunger responded also that the Air District has authority from before AB32 in the regulation of carbon.

Mr. Altshuler suggested that free buses to BART might be an effective way to get commuters to use transit on Spare the Air days. Mr. Broadbent commented that this idea might be brought forward for the summer of 2009.

Dr. Kim suggested that University of California at Berkeley has a School of Public Health, and that students could be employed in summer internships.

Dr. Bedsworth spoke briefly about the June 24-27 conference in Portland Oregon, noting that 5 members would attend and follow-up would be done with Mary Ann Goodley, Executive Office Manager, in addition to polling for the next Advisory Council meeting.

Dr. Kim announced that she recently received a promotion, and therefore she would be stepping down from the Advisory Council in mid-April. Brian Zamora will Chair the Public Health Committee after Dr. Kim departs. Dr. Kim was thanked by the council members for her participation and contributions to the Advisory Council and the Public Health Committee.

9. Time and Place of Next Meeting: 9:00 a.m., Thursday, May 15, 2008, 939 Ellis Street, San Francisco, CA 94109.

10. Adjournment: The meeting adjourned at 12:43 p.m.

Jean Marie Mink
Temporary Executive Secretary