



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
EXECUTIVE COMMITTEE MEETING

COMMITTEE MEMBERS

JERRY HILL – CHAIR
BRAD WAGENKNECHT - SECRETARY
JOHN GIOIA
MARK ROSS
GAYLE B. UILKEMA

PAMELA TORLIATT – VICE CHAIRPERSON
CHRIS DALY
SCOTT HAGGERTY
TIM SMITH

THURSDAY
APRIL 10, 2008
9:30 A.M.

4TH FLOOR CONFERENCE ROOM
DISTRICT OFFICE

AGENDA

1. **CALL TO ORDER – ROLL CALL**
2. **PUBLIC COMMENT PERIOD** (*Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3*) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 939 Ellis Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.
3. **APPROVAL OF MINUTES OF DECEMBER 17, 2007**
4. **QUARTERLY REPORT OF THE HEARING BOARD – JANUARY 2008 – MARCH 2008**
T. Trumbull/5127
TerryT1011@aol.com
5. **REPORT OF THE ADVISORY COUNCIL: JANUARY – MARCH, 2008**
L. Bedsworth/5127
bedsworth@ppic.org
6. **PRODUCTION SYSTEM PROJECT UPDATE**
J. McKay/4629
jmckay@baaqmd.gov

The Committee will receive an update on the Production System project.
7. **CLOSED SESSION WITH DISTRICT'S LABOR NEGOTIATIONS**
(*Government Code § 54957.6(a)*)

Agency Negotiators: Jack P. Broadbent, Executive Officer/APCO
Michael Rich, Human Resources Officer

Employee Organization: Bay Area Air Quality Management District Employees' Association,
Inc.

8. COMMITTEE MEMBER COMMENTS/OTHER BUSINESS

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

9. TIME AND PLACE OF NEXT MEETING: AT THE CALL OF THE CHAIR

10. ADJOURNMENT

**CONTACT EXECUTIVE OFFICE- 939 ELLIS STREET SAN
FRANCISCO, CA 94109**

**(415) 749-5127
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov**

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

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

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

APRIL 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>	Friday	4	10:00 a.m.	4 th Floor Conf. Room
Advisory Council Technical Committee <i>- (Meets 1st Monday of each even Month)</i>	Monday	7	9:30 a.m.	Board Room
Advisory Council Public Health Committee <i>(Meets 2nd Wednesday of each even Month)</i>	Wednesday	9	1:30 p.m.	Board Room
Advisory Council Air Quality Planning Committee <i>(Meets 1st Thursday of each even Month)</i>	Thursday	10	9:30 a.m.	Board Room
Board of Directors Executive Committee <i>(At the Call of the Chair)</i>	Thursday	10	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
Joint Policy Committee	Friday	18	10:00 a.m. – 12:00 p.m.	BCDC 50 California St., 26 Fl. San Francisco, CA
Board of Directors Legislative Committee <i>(Meets 4th Monday of every Month)</i>	Monday	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	23	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee – <i>(Meets 4th Thursday of each Month)</i> - CANCELLED	Thursday	24	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Legislative Committee <i>(Meets 4th Monday of every Month)</i> – RESCHEDULED TO MONDAY, APRIL 21, 2008	Monday	28	9:30 a.m.	4 th Floor Conf. Room

MAY 2008

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
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

MAY 2008

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Regular Meeting (<i>Meets 2nd Wednesday of every odd Month</i>) – RESCHEDULED TO THURSDAY, MAY 15, 2008	Wednesday	14	10:00 a.m.	Board 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>)	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 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>)	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 Stationary Source Committee (<i>Meets 3rd Monday quarterly</i>)	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

JUNE 2008

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
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

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4/3/08 (3:15 p.m.)
P/Library/Forms/Calendar/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Mark Ross and Members
of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 2, 2008

Re: Executive Committee Draft Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Executive Committee meeting of December 17, 2007.

DISCUSSION

Attached for your review and approval are the draft minutes of the December 17, 2007 Executive Committee meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Bay Area Air Quality Management District
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 749-5000

DRAFT MINUTES

Summary of Board of Directors
Executive Committee Meeting
9: 30 a.m., Monday, December 17, 2007

1. **Call to Order - Roll Call:** Chair Mark Ross called the meeting to order at 9:41 a.m.

Present: Mark Ross, Chair, Chris Daly, Scott Haggerty, Jerry Hill, Tim Smith, Brad Wagenknecht.

Absent: Pamela Torliatt, Gayle Uilkema.

2. **Public Comment Period:** The following individuals spoke during public comment.

Christopher Muhammad

Francisco Da Costa

Director, Environmental Justice Advocacy

Marie Harrison

4909 3rd Street

Green Action

San Francisco, CA 94124

San Francisco, CA

Comments were made regarding the dust emissions from the work being done by Lennar in the Bayview-Hunters Point community; the health issues associated with exposure to the dust; and a request for an update on penalties to be imposed on Lennar.

3. **Approval of Minutes of November 19, 2007:** Director Smith moved approval of the minutes; seconded by Director Hill; carried unanimously without objection.

4. **Consideration of the 2008 Priority Recommendations from the Advisory Council:** Fred Glueck, Advisory Council Chair provided priority topic recommendations for 2008, as requested by the Executive Committee at its November 9, 2007 meeting, for consideration.

Mr. Glueck provided Advisory Council Priority topics for 2008 which include the following:

- Climate Protection and Air Quality;
- CARE Program; and
- Holistic approach to integrate Air District policies regarding Air Quality/Climate Protection and Public Health

Director Ross thanked Mr. Glueck for his presentation.

Director Daly inquired about policies the Air District could consider as part of the mitigation package as the CARE program moves forward, and suggested that maybe there are some policies and procedures that could be reviewed and incorporated as part of the Air District's program.

Speaker: The following individual spoke on this agenda item:

Francisco Da Costa

Director Ross thanked Mr. Da Costa.

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

- 5. Production Systems Update:** The Committee received a status report on progress made with regard to the Production System.

Mr. Chiladakis noted that as the Air District moves forward, it is expected to complete the requirement phase at the end of March.

Mr. Chiladakis noted that the Air District will go into a detailed design phase mid-year, 2008 and will actually move forward towards writing some of the actual codes.

Mr. Broadbent suggested to Director Haggerty and Chairperson Ross that staff come back to the Committee with a demonstration of the project.

Committee Action: This report was provided for information only.

- 6. Status of Comprehensive Air District Audits:** *The Committee received an update on the Air District audits.*

Jack Broadbent, Executive Officer/APCO, presented the report regarding the Air District audit.

Mr. Broadbent provided an overview to the Committee on the Carl Moyer program audit reviewed by three state agencies, including the California Resources Board, the Bureau of State Audits and the Department of Finance.

Internal Audit Summary

Mr. Broadbent stated that an internal audit would be conducted.

Air District has recognized the value of performing an internal audit the Board of Directors set aside \$400,000 in the 2007/2008 District Budget this audit that is scheduled to begin in January 2008.

Director Hill asked if this audit was inspired by the Carl Moyer Program. Mr. Broadbent informed Director Hill that yes it was indeed inspired by the Carl Moyer Program and feels it would be a good idea to conduct an internal audit, as it will allow testing of actual versus documented processes, review of applicable federal and state guidelines; and updated processes and implementation of controls.

Committee Action: Informational Item.

7. **Closed Session Conference with Air District Labor Negotiators:** *Pursuant to Government Code Section 54957.6(a).*

The Committee convened to closed session at 10:25 a.m. and reconvened to open session at 10:41 a.m. Brian Bunger, Legal Counsel reported that the Committee met in closed session to discuss the Air Districts Labor Negotiations and provided direction to staff.

8. **Committee Member Comments/Other Business:** Director Smith asked about the Air District's position with Lennar. Mr. Bunger provided Director Smith with a brief summary.
9. **Time and Place of Next Meeting:** At the Call of the Chair.
10. **Adjournment.** The meeting was adjourned at 10:45 a.m.

Charlene Forbush
Legal Assistant

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

TO: Chairperson Jerry Hill and Members
of the Executive Committee

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

DATE: April 3, 2008

RE: Hearing Board Quarterly Report – JANUARY 2008 – MARCH 2008

RECOMMENDED ACTION:

This report is provided for information only.

DISCUSSION:

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
Alameda/Hayward	Appeal of ROB SIMPSON for RUSSELL CITY ENERGY CENTER (Appeal – Docket No. 3546) – Appeal of ROB SIMPSON from the issuance of an Authority to Construct for the RUSSELL CITY ENERGY CENTER Application No. 15487 – Hearing on Request for Waiver of Fees	Appeal	Denied. Appellant did not provide appropriate documentation to support the request.	===	===
Alameda/Hayward	Appeal of ROB SIMPSON for RUSSELL CITY ENERGY CENTER (Appeal – Docket No. 3546) – Appeal of ROB SIMPSON from the issuance of an Authority to Construct for the RUSSELL CITY ENERGY CENTER Application No. 15487 – Hearing on Issue of Jurisdiction	Appeal	Dismissed. Hearing Board did not have jurisdiction over this Appeal.	===	===
Alameda/Livermore	APCO vs. MASOOD AMINI-FILABAD, aka AMINI FILABAD and HAMID AMINI individually and d/b/a LIVERMORE BEACON SITE NO. C8876 (Accusation – Docket No. 3548) – Accusation and Request for Order for Abatement from regulation requiring compliance to operate with Permit to Operate and with permit conditions and from regulation limiting emissions of organic compounds from gasoline dispensing facilities	2-1-302 8-7-301	Granted	===	(VOC)
Solano/Benicia	VALERO REFINING COMPANY-CALIFORNIA (Emergency Variance – Docket No. 3547) – Emergency Variance from regulation limiting emissions of organic compounds from storage tanks (APCO opposed.)	8-5-304 8-5-320 8-5-321 8-5-322 8-5-328	Denied	1/8/08 to 2/7/08	(H ₂ S)

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
Solano/Benicia	VALERO REFINING COMPANY-CALIFORNIA (Short-Term Variance – Docket No. 3547) – Variance from regulation limiting emissions of organic compounds from storage tanks and from regulation requiring compliance with permit conditions	2-1-307 2-6-307 8-5-304, 320, 321, 322 & 328	Applicant amended Application for Variance to Regular Variance (over 90 days). Matter continued to May 22, 2008	1/9/08 to 4/7/08 Amended to 1/9/08 to 4/30/08	(Toxic Organic Compounds)
Solano/Benicia	VALERO REFINING COMPANY-CALIFORNIA (Emergency Variance – Docket No. 3550) – Emergency Variance from regulation requiring compliance with permit conditions (APCO not opposed.)	2-1-307 (Condition \$ 22949, Part 3)	Granted	2/29/08 to 3/1/08	22.10 # (SO ₂)

NOTE: During the first quarter of 2008, the Hearing Board dealt with five Dockets on five hearing days. A total of \$ 9,447 was collected as Hearing Board fees and \$36.69 was collected as excess emission fees during this quarter.

EXCESS EMISSION DETAILS

<u>COMPANY NAME</u>	<u>DOCKET NO.</u>	<u>TOTAL EMISSIONS</u>	<u>TYPES OF EMISSIONS</u>	<u>PER UNIT COST</u>	<u>TOTAL AMT COLLECTED</u>
VALERO REFINING CO.-CALIFORNIA	3550	22.10 lbs	SO ₂	\$ 1.66/lb	\$ 36.69
TOTAL COLLECTED:					<u>\$ 36.69</u>

Respectfully submitted,

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

Prepared by: Neel Advani
Reviewed by: Mary Ann Goodley

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson, Jerry Hill and Members
of the Executive Committee

From: Louise Bedsworth, PH. D.,
Chairperson Advisory Council

Date: March 11, 2008

Re: Report of the Advisory Council: January 1, 2008 – March 12, 2008

RECOMMENDATIONS:

Receive and file the attached minutes.

DISCUSSION:

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

- A) Advisory Council Executive Committee Meeting of January 9, 2008: The Executive Committee set goals and priorities for the coming year to be discussed at the full Council meeting/retreat held immediately following the Committee meeting.
- B) Advisory Council Regular Meeting/Retreat of January 9, 2008: The Advisory Council received a report of the Executive Committee meeting of December 4, 2007. The Advisory Council reviewed topics identified for discussion at the retreat submitted by Council members and the Executive Officer/APCO, Jack Broadbent. The topics identified for discussion included: Climate Protection, CARE Program, PM Control, Spare the Air, Asthma and Indoor Air Quality and associated Public Health issues, taking a holistic approach towards education, public health. The Council conducted a breakout session in which each committee met separately to discuss and give priority to the study topics and establish meeting schedules for the year. The Council reconvened and each committee chair reported on its study topics and meeting schedules for the year.
- C) Air Quality Planning Committee Meeting of February 7, 2008: The Committee met and received a presentation report on the Impact of the Metropolitan Transportation Commission's Regional Transportation Plan and Regional Climate Protection Efforts. The presentation was given by MTC staff members Raymond Kan and Harold Brazil, Vice-Chair of the Advisory Council.

- D) Technical Committee Meeting of February 11, 2008: The Technical Committee received an update on PM Inventory Development, Modeling and Data Analysis from Air District staff Dr. Saffet Tanrikulu, Research and Modeling Manager and Dr. David Fairley, Statistician.
- E) Public Health Committee Meeting of February 13, 2008: The Public Health Committee continued discussions on draft strategy recommendations for Asthma and Indoor Air Quality. The Committee received an update on the Proposed Regulation 6, Rule 3: Woodburning Devices from Air District staff, Janet Glasgow, Air Quality Program Manager. The Committee also discussed possible topics/guest speakers for future meetings.
- F) Advisory Council Executive Committee Meeting of March 12, 2008: The Executive Committee received reports from each of its Standing Committees.
- G) Advisory Council Regular Meeting of March 12, 2008: The Council received a presentation and overview of the Air Districts Proposed Regulation 6; Rule 3: Wood Burning Devices from Kelly Wee, Director of Compliance and Enforcement. The Committee also received a report from Jack Broadbent, Executive Officer/APCO outlining Air District activities.

The minutes of the above referenced meetings are attached.

Respectfully submitted,

Louise Wells Bedsworth, PH.D.
Advisory Council Chairperson

Prepared by: Mary Ann Goodley

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

DRAFT MINUTES

Advisory Council Executive Committee
9:00 a.m., Wednesday, March 12, 2008

1. **Call to Order – Roll Call:** Chairperson Louise Bedsworth, Ph.D., called the meeting to order at 9:05 a.m.

Present: Louise Bedsworth, Ph.D., Chairperson, Jeffery Bramlett, Harold Brazil, Emily Drennen, Janice Kim, M.D.

Absent: Kraig Kurucz.

Also Present: Sam Altshuler.

2. **Public Comment Period:** There was none.
3. **Approval of Minutes of March 12, 2008:** Mr. Brazil moved approval of the minutes as amended, second by Ms. Drennen, the minutes carried unanimously.
4. **Standing Committee Chair Reports:**

Air Quality Planning Committee Meeting of February 7, 2008 – Emily Drennen, Chairperson. Ms. Drennen stated that in February there was a fantastic presentation from two individuals from the Metropolitan Transportation Commission (MTC). The presenters were Ray Kon and Harold Brazil, as the both talked about the Regional Transportation Plan (RTP). The brief outline for the calendar was that division policy strategies were to be adopted in mid March. In July MTC is scheduled to adopt a constrained financial investment plan, with the hope of adopting RTP in February 2009.

Some of the goals were to reduce Vehicle Miles Traveled (VMT) 10% from today, and a drop in particulate matter (PM). There was a call for projects on March 5, 2008 so this is where the projects were gathered throughout the region. Ms. Drennen, further stated that Mr. Brazil spoke about Economy, Equity and Environment and its 3 goals of the RTP. The base case from ABAG is a 25% increase in population from 2006 to 2035; a 30% increase in VMT in the same period and a 50% increase in jobs in the same period and this is without doing any and this information was provided by ABAG.

Mr. Drennen further stated that there was an interesting analysis conducted in numbers of gallons of gas per day, per person regionally. At present, individuals use about one and one quarter gallons of gas per person and the target in 2035 is sixth tenths of a gallon. In addition, there were 3 investment scenarios that RTP is reviewing, essentially looking at 3 different ways of looking at it. 1) invest the money through highways and getting more efficiency from the highways; 2) to increase the number of HOT lanes and express buses, doubling their time bus speed; and 3) a regional rail/ferry solution. However, even the best 2 to be used are still 25% over the target for PM 2.5 and PM 10 was 120% over the target. This indicates that there is still some ways to go, even with those 3 different strategies. In the end, it looks as if there will need to be an integrated strategy or pieces of those 3 include increasing the efficiencies of the highways, new congestion pricing, HOT lanes, buses and regional rail. Pricing needs to be changed in the near term, change the land use in a much longer period of time and change the attitudes and behavior regionally, in regards to transportation in over a longer period of time, and technology will help.

Hopefully, the Committee will look at congestion fees in other cities and areas and how they work in terms of reducing air quality and also, and how they are funding transit. Also, the Committee hopes to provide some advice to the Air Quality Board regarding the policy implications of these congestion rules.

Ms. Drennen concluded her report to the Committee.

Chairperson Bedsworth informed the Committee that she spoke to Mr. Broadbent, Executive Officer/APCO with regard to having a presentation for the entire Council on RTP, so that everyone is familiar with the process. Dr. Kim asked about the overall reduction of PM and it being tied to the Air District. Mr. Brazil responded that the emission inventories were generated for the 3 basic pollutants and the analysis that was conducted. The 3 were CO₂, PM 2.5 and PM 10. There were 3 investment transportation system investment scenarios. These were crossed tapped with 3 policy changes, which included land use changes, and pricing strategies that were separate from whatever pricing that was going on with HOT lanes. Overall, there were 18 scenarios that were tested, which included the baseline scenarios. Once the emission inventories were generated, they were all on-road mobile source emission inventories, which included transit vehicles, as rail and ferry was not included.

Mr. Brazil stated that with land use changes there were changes in the travel characteristics, such as changes in speeds, changes in congestion and decreases in VMT. The investment in HOT lane, express bus one can see a shift in motor travels you can see a reduction in VMT. This is where you will see a change in the emission levels for the different pollutants. Mr. Brazil stated that there were some targets that were set by the Governors Executive Order, therefore leaving the horizon year on the RTP as 2035 as this is the half way mark between 2020 and 2050 in the executive order. This is in attempt to get back to 1990 based on 2020 and then give get 80%

below in 2050, so 40% below just with the CO₂, and continue to work with the Air District to establish 10% PM 2.5 and 40% on PM 10.

Jean Roggenkamp, Deputy Air Pollution Control Officer stated that the Air District is very pleased with the efforts that MTC is making and is quite challenging, but it also helps define the policy with transportation choices but with an air quality perspective, in addition to many other perspectives.

Chairperson Bedsworth commented that if none of them meets the target, which strategy will be the best of the three. Mr. Brazil responded to Chairperson Bedsworth and stated that the policy changes were a separate land use scenario change, the other was the pricing change and those were combined and found out that they were still short and added on the 2 additional categories, which included telecommuting to reduce VMT so those 2 were at the bottom. The policies combined with the freeway performance initiative, which includes ramp metering and message board systems, and the HOT lanes, those were the 2 that provided the best results from an emissions perspective. This was the closest to getting everyone getting to the target, but for CO₂ it is 80% over the target and it was even worse for PM.

Mr. Brazil further stated that the PM 2.5 target is easier to get to as that only requires a 10% reduction, but the PM 10 target is a 40% reduction from the 2006 base year level. As this made the scenarios 125% over the target with the best 2 scenarios, as the analysis is just a preliminary analysis, the projects are now being collected that are being submitted to see if these will be included in the RTP.

Ms. Drennen has stated that the RTP is looking at drastically increasing the cost of driving. This would include increasing the cost of driving five times and Mr. Brazil stated that he believes that is double. Ms. Drennen also stated that this is why

Jean Roggenkamp, Deputy Air Pollution Control Officer clarified that the position of the Public Health Officer would need to be considered during budget discussions.

Chairperson Bedsworth moved forward with the list of topics. The topics included information received from council members and from Jack P. Broadbent, Executive Officer/Air Pollution Control Officer.

Going forward Chairperson Bedsworth suggested committee members consider which topics each Committee would consider and the order of consideration. There may be overlap with other Committees. For instance, climate change issues conflict with criteria pollutant goals, which might want to be considered by several committees. Chairperson Bedsworth noted one example that Mr. Broadbent brought up. Specifically, if the CO limit for Stationary Sources was raised, they could operate more efficiently and reduce greenhouse gas emissions. It was suggested that this may

be a good topic for the Technical Committee to discuss. The Planning Committee should think about transportation and land use planning, smart growth issues and how they can be tied together.

It was noted that having presentations given to the Advisory Council as a whole on topics of interest to multiple committees will help to eliminate multiple committee presentations. This possibility can also be thought about in the Committee discussion, but certainly in the follow up discussion. Chairperson Bedsworth requested each Committee Chair develop a regular schedule of meeting dates.

Mr. Blonski commented that from a planning perspective the Committees should identify outcomes that are desirable so that it is not just discussion on a particular topic, but it is working toward a product that can be brought forward to the full Council.

Chairperson Bedsworth agreed and noted that there will be topics that will just be for discussion, but there will also be topics where recommendations will be made and identifying those topics early on and providing a timeline for when the recommendation will be brought forward to the Council will insure that meetings occur on schedule and that the recommendation is made in a timely manner to the Air District. For example, if the Council was to consider the potential gas fee and what the Air District might do with that type of money, then the Council would try and have recommendations from the Council brought forward in the summer, etc.

Mr. Altshuler suggested that more attachments be included with the minutes, as it will make the minutes more complete.

Mr. Glueck has suggested that if there are presenters, to try to get them to provide their documentation as reference to verify the facts or statements made.

Chairperson Bedsworth suggested that guidelines be provided to speakers that may include providing their presentation, as well as providing the Committee with the highlights.

Dr. Kim asked that the presentation also be attached, when there are minutes for approval. Mary Ann Goodley, Executive Office Manager agreed that going forward this would happen.

Dr. Kim indicated that she was not aware of a template being circulated with regard to the goals and objectives and Chairperson Bedsworth commented that it was only a discussion. It was noted that the Executive Committee would work to formalize a memo of some sort to provide to speakers.

- 5. Committee Member Comment/Other Business:** Mr. Blonski asked how the information should be recorded during the breakout session with the respective

Committees. Mr. Kurucz responded by informing Mr. Blonski that the information would be reported after the breakout session.

6. Time and Place of Next Meeting: 9:00 a.m., May 14, 2008, Conference Room 716, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment: The meeting adjourned at 9:50 a.m.

Vanessa Johnson
Acting Clerk of the Board

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

DRAFT MINUTES

Advisory Council Regular Meeting
9:30 a.m., Wednesday, January 9, 2008

Call To Order

Opening Comment: Chairperson Bedsworth called the meeting to order at 9:50 a.m.

Roll Call: Louise Bedsworth, Ph.D., Chairperson, Cassandra Adams, (9:58 a.m.), Sam Altshuler, Harold Brazil, Ken Blonski, Robert Bornstein, Ph.D. (9:51), Jeffrey Bramlett, Irvin Dawid, Fred Glueck, William Hanna, John Holtzclaw, Ph.D., Janice Kim, M.D., Kraig Kurucz, Karen Licavoli-Farnkopf, M.P.H, Kendal Oku, Linda Weiner, and Brian Zamora.

Absent: Emily Drennen, MPA, Robert T.P. Huang, Ph.D., and Steven T. Kmucha, M.D.

Dr. Bedsworth asked members present to introduce themselves to the Council's newest member, Mr. Oku.

Commendation/Proclamation – *The Advisory Council presented a plaque to outgoing Advisory Council Chairperson, Fred Glueck for his outstanding service on the Council this past year. The Council also congratulated incoming Chairperson, Dr. Bedsworth on the recent birth of her baby boy, Wiley.*

Public Comment Period: There were none.

Ms. Adams arrived at 9:58 a.m.

Consent Calendar (1 Item)

1. Approval of Minutes of November 14, 2007: Mr. Bramlett moved approval of minutes, Mr. Altshuler seconded the motion to approve with minor edits; the motion carried unanimously.

Committee Reports and Recommendations

2. Report of the Executive Committee Meeting of December 4, 2007

Mr. Glueck provided a report on the discussion of format, agenda and list of topics for the retreat. Mr. Glueck received suggestions on where the committee should be directing their attention and efforts. Priorities received from the Advisory Council and Jack Broadbent were identified as follows:

- a) Greenhouse Gases,
- b) CARE Program, and associated Public Health issues
- c) Taking a holistic approach towards Education, Public Health with regard to regulations, policies, and procedures, and
- d) Consideration of hiring a full-time Public Health Officer.

This set of recommendations was made to the Executive Committee of the Board of Directors on December 17, 2007.

3. Report of the Public Health Committee Meeting of December 12, 2007

Mr. Bramlett reported briefly that there had been discussion on grouping issues and how to prioritize, and a discussion of indoor air quality/asthma strategy.

Retreat Format

4. Discussion with Air District Management on Key Issues Facing the District and Proposed Assignments to the Council:

Ms. Jean Roggenkamp, Deputy Air Pollution Control Officer, spoke on behalf of Jack Broadbent, Executive Officer.

Ms. Roggenkamp stated she had nothing to add to the work of the Advisory Council on the topics for the next year; management is comfortable with the areas the Advisory Council has chosen.

Dr. Bedsworth elaborated on the issue of identifying topics.

Dr Bedsworth noted two lists of topics, one from the end of last year solicited from Advisory Council Members, and another list identified by Jack Broadbent, resulting from the December 4th Executive Committee Meeting, both of which mapped one another closely, and yielded the following topics:

- Climate Protection
- CARE
- PM Control
- Wood Smoke
- Spare the Air
- Asthma
- Indoor Air Quality
- Other (broader) items

The two items emphasized by the Council were Climate Protection and CARE. Dr. Bedsworth questioned how to resolve conflicts between greenhouse gas emission reductions and criteria pollution reductions; e.g., carbon monoxide limit on stationary sources - if that was made less stringent, it would allow these sources to operate more efficiently and reduce greenhouse gas emissions. How does the District evaluate those types of trade-off issues?

Regarding the CARE Program, how does the District respond proactively, and not reactively, in the communities that are identified (by Air Resources Board and the CARE Program) as being burdened? (Example: Risk Assessment for West Oakland by the Air Resources Board.)

Regarding Spare the Air Program, Jack Broadbent spoke once regarding the need to shift from an episodic program to a long-term, individual behavioral concept. A need for constructive comments was emphasized at that time.

Dr. Bedsworth distributed a table with topics from Jack Broadbent and from Council members, and a potential committee to handle each topic.

Analysis of Conflicts topic could be a priority for the Technical Committee. Transportation issues could be a priority for the Planning Committee. Also, Land Use and Smart Growth, and Gas Fee and what the District could do with monies generated from it. Public Health Committee: how does the District start to deal with information coming out of the CARE Program and related programs?

Dr. Bedsworth asked that, during the individual committee sessions and coming back together as a group, Council members concentrate on how to make the Council as efficient and effective as possible; with the lists in mind, to prioritize topics by committee, and identify products coming out of that process, i.e. recommendations for actions, protocols for recommendations, timelines for specific recommendations, or items to explore to determine if a recommendation is called for or not. Identify items of overlap among committees and discuss value of revisiting specific topics in next full Council meeting. Also get a list of committee meeting dates and times.

Discussion ensued with question and answer session.

Breakout Session began at 10:32 a.m.; meeting to be reconvened at 11:45 am.

5. Convene to Working Lunch for Meetings and Discussion Sessions of the Public Health Committee, Air Quality Planning Committee and Technical Committee

The Council participated in a working lunch/Standing Committee format in which each Committee separately met to discuss and give priority to the study topics discussed by the Executive Committee, District staff and the Council members. The Committees also established a meeting schedule for the year.

6. Reconvene to Full Council Format for Follow-up on Committee Discussion Sessions

Meeting reconvened at 12:12 p.m. to Full Council Format for Follow-up on Committee Discussion Sessions

The Advisory Council reconvened to receive the reports of the Standing Committees on their study topic priorities and meeting schedule, and to conduct any further round table discussion concerning them. Mr. Brazil, Vice-Chairperson reopened the meeting.

Air Quality Planning Committee – Dr. Holtzclaw presented

Fred Glueck presented a challenge on how Committee members conceptualize and contextualize what they do, activities associated with global warming and gas emissions, and how to help educate and convince the public of which global warming and emissions reduction programs need to be implemented.

Three areas that will comprise the Planning Committee's agenda:

- a) Regional Gas Fee – implementation strategies, monies use, illuminate the cost/benefit connection; recommendations by late summer.
- b) Transportation Modes – increasing transit use, reducing single-occupancy VMT, increasing non-vehicular modes, and looking at regional transit funding – overlap with previous item, public education related to global warming, transportation efficiency, coordination with MTC's planning process; recommendations by late fall.
- c) Smart Growth – relating it to transportation modes, walking and bicycling, transit use, VMT reductions.

Dr. Holtzclaw stated one of the most important things is the need to conceptualize how to impact the public discussion to move in the direction of reducing global warming gas emissions.

Ms. Weiner asked, with regard to congestion pricing, if an exception for populations that need a car had been considered. Dr. Holtzclaw and Mr. Dawid responded that in terms of specifics of application of congestion pricing, they had not considered that.

Mr. Glueck gave an overview of the committee's objectives: to look at the proposals' effectiveness. Is there synergy between the plans, and overall timeframes? To identify whether synergies exist between the way plans are being proposed and developed. To get the public buy-in, and to get their approval and participation in these plans.

Mr. Blonski acting as Committee Chairperson, in Emily Drennen's absence, emphasized the importance of having specific outcomes in the form of recommendations to the Advisory Council this coming year. **Meetings to be held the first Thursday of every other month, at 9:00 am**, changed from Wednesday. Dr. Bedsworth asked if areas for future full Council discussion, or overlap were identified, about speakers, etc. Mr. Blonski suggested a follow-up with answers to those questions and mentioned an MTC representative for a speaker.

Technical Committee – Mr. Kurucz presented

- Will produce Implications of Climate Change, synergies and conflicts of Climate Change and Criteria Pollutants
- Implications of Fuel Choice
- Multi-pollutant, Multiple-Scale Models (Integrated Multi-Pollutant Management)

Meetings 1st Mondays at 9:30, or second Mondays as an alternate, every other month.

Speaker list:

- Mike Lehman from UC Davis – Implications of Climate Change on Particulate Matter
- EPA – Single Multi-Pollutant Models, Multiple-Scale
- Livermore – Regional Climate Change Impacts
- Rob Harley – Effects of Climate Change on Ozone Strategy

Mr. Kurucz summarized: outcomes – to report the synthesis of speakers, i.e., implications of climate change on Bay Area Air Quality Program, rather than specific recommendations.

Public Health Committee – Dr. Kim presented

- Finalize Indoor Air Quality and Asthma recommendation; input from staff in March, and by May present to the full Advisory Council for approval
- PM Control and Wood Smoke
- Work with Air District on the CARE Program, with input from other stakeholders
 - Bay Area Environmental Health Coalition
 - Local Health Officers – West Oakland
 - Court – West Oakland

Use the Risk Assessment as a case study model for future local community impact endeavors, and find out from District what local communities are doing about the initiatives and policies it presents.

The Committee **will meet on the second Wednesday of the even months** that the Advisory Council is not meeting at **1:30 pm, except for June 4th**.

Dr. Bedsworth asked if there are topics of overlap to bring to the full Council. Dr. Bornstein mentioned the EPA on current modeling, S. T. Rau will speak in San Francisco in May, and perhaps he would be able to address the directions in research in air quality at the EPA.

The Planning Committee did not touch on Goods Movement, but may have overlap with Public Health Committee's West Oakland issues and Green Ports initiative. Ms. Roggenkamp commented that the invitation to Dr. Iton might interest the full Advisory Council.

Ms. Kim and Ms. Roggenkamp felt that waiting for reports from the Air Resources Board or CARE before hearing Dr. Iton's and others' presentations would not be necessary.

Dr. Bedsworth noted that there would not be much overlap.

Questions – Mr. Dawid asked about the Wood Smoke Ordinance. Dr. Kim responded that the committee wanted to hear what public comments there were. It is a priority for the next meeting. Dr. Kim asked about the second round of workshops, would the District provide proposed revision. Ms. Roggenkamp replied it would announce any potential changes to the draft regulation, reporting out to the full council in March.

Kelly Wee, Director of Compliance and Enforcement, responded regarding the Wood Smoke Rule development, PM 2.5 should be treated as a regional pollutant.

Gary Kendall spoke about the 5 forecast zones for Particulate Matter for the Bay Area. These are the same zones used for ozone forecasts.

OTHER BUSINESS

10. Committee Member Comments/Other Business: Dr. Bedsworth reminded the Council of the Ethics Training requirement.

Mr. Dawid asked about three million dollars in Climate Protection grants. This is for Climate Protection as opposed to Air Quality: is this competing with Air Quality or is it a new fund? District Counsel Brian Bunger responded that it is not ongoing funds, and is not competing with anything. Mr. Dawid remarked that Marc Jacobson produced a landmark study showing how CO₂ is a public health issue.

11. Time and Place of Next Meeting: 10:00 a.m., Wednesday, March 12, 2008, 939 Ellis Street, San Francisco, CA 94109.

12. Adjournment: The meeting adjourned at 1:00 p.m.

Jean Marie Mink
Temporary Executive Secretary

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

DRAFT MINUTES

Air Quality Planning Committee
9:30 a.m., Thursday, February 7, 2008

1. **Call to Order:** Chairperson Drennen called the meeting to order at 9:35 a.m.

Roll Call: Emily Drennen, Chairperson, Ken Blonski, Harold Brazil, Irvin Dawid, and John Holtzclaw, Ph.D.

Absent: William Hanna, Robert Huang, Ph.D., Kraig Kurucz, and Kendal Oku.

2. **Public Comment Period.** There were none.

3. **Approval of Minutes of October 10, 2007:** Mr. Blonski commented that the minutes were exceptionally well done. Dr. Holtzclaw moved to approve the minutes, Mr. Dawid seconded. Chair Drennen called for approval and the draft minutes were approved unanimously.

4. **Impact of MTC's Regional Transportation Plan (RTP) on State and Regional Climate Protection Efforts:** the *Committee received presentations by Raymond Kan, MTC Planner and Harold Brazil, MTC Air Quality Planner Analyst on MTC's RTP.*

Mr. Kan provided an overview of the RTP, the 25-year transportation planning document for the Bay Area. It is anticipated this plan will be adopted by the MTC and the Board of Directors' Joint Policy Committee in February 2009.

Mr. Kan presented slides, reflecting the plan's core elements and noted the plan's performance objectives, including:

- CO₂ reduction
- Particulate matter reduction
- Congestion reduction delay
- VMT reduction
- Affordability

The Scenario Analysis exercise concluded that closing the gap will require a combination of:

- Infrastructure
- Pricing
- Land use
- Technology
- Individual behavioral change

The vision-scenario exercise was presented to the public in October, at the fall summit.

Performance objectives were expanded from the targets in the 2005 plan “Transportation 2030” to include Maintenance and Safety. Measures addressing road pavement conditions, highway conditions, transit asset conditions, as well as several measures on collisions and fatalities, involving vehicles, pedestrians and bicycles, were added.

Mr. Kan informed the Committee that no recommendation of a performance objective for Security had been made. It was noted that the target to reduce the percentage of household income spent on transportation and land use by 10% from today’s levels, was mistakenly omitted from the presentation. A new target was added: the number of low-income households within walking distances of enhanced and expanded transit service; walking distance was estimated to be between one quarter and one half mile.

Mr. Kan stated the final set of performance objectives are for Clean Air and Climate Protection goals: a 10% reduction in vehicle miles traveled (VMT) from today’s levels and a reduction of particulate matter (PM). Mr. Hilken elaborated on the background for the PM₁₀ and the PM_{2.5} standards that were suggested to the MTC and discussion regarding reduction standards ensued.

Mr. Kan stated the intention of using the performance objectives to validate projects going to the RTP and to measure future progress toward the MTC’s goals and objectives. With regard to a qualitative track, draft vision policy strategies were to be given to the Commission’s Planning Committee meeting the following morning for initial review.

Discussion ensued regarding stabilized population versus growth and interregional trips, as well as consideration of those and other factors in making projections. Mr. Brazil provided a brief description of travel demand models. Dr. Holtzclaw expanded with a further description of the modeling process with regard to economics, jobs, households, and regional accommodation based on factors from outside of the region.

Mr. Kan stated the timeline for the Vision Policy Strategies (VPS) as follows: after review February 8 by the MTC’s Planning Committee, the VPS would then go on to the Board of Directors’ Joint Policy Committee for review the following week. The VPS will then go to the Partnership Board later in February and it is anticipated that the VPS policies will be adopted by the Commission in mid-March. The MTC is looking forward to having a final draft of a financially constrained investment plan by July; per federal regulations the RTP must be financially constrained.

Mr. Kan and Mr. Brazil answered committee members’ questions regarding transportation projects, plan updates and the concept of security coming from the federal definition, in terms of terrorist attacks, rather than accidents.

Mr. Brazil’s presentation “Long Range Transportation Planning Scenarios to Achieve Greenhouse Gas Emission Targets” began.

Mr. Brazil provided an overview to his slide presentation along with a legislative background. Major climate change initiatives and recent court cases were noted,

- Assembly Bill 1493 (Pavley, 2002)

- 2005 Governor Schwarzenegger's Executive Order S-3-05
- Global Warming Solutions Act of 2006 (AB32)
- Mass. v. USEPA, US Supreme Court, Apr. 2007
- Chrysler-Jeep v. CARB, US District Court (Fresno), Dec. 2007
- USEPA Denial of California's waiver, Dec. 2007
- California v. USEPA, US Court of Appeals, Jan. 2008 (9th District, San Francisco)

Predictions and projections from ABAG for the years 2006-2035 were enumerated:

- 25% increase in population in the region.
- 30% increase in VMT
- 50% growth in jobs.

A discussion of the effects of growth in the Central Valley ensued, and the suggestion to begin providing data on the growth of areas surrounding the region was made.

Mr. Brazil reviewed the three principles introduced in Mr. Kan's presentation: Economy, Environment, and Equity. Principles by which the strategies, as well as the environmental performance targets, were established, Mr. Brazil gave an explanation of how the targets were determined. There was a brief discussion about the difficulty of reaching the targets and about the emission sources, mobile and stationary.

Mr. Hilken clarified, when these targets were suggested to MTC, it was assumed that equivalent reductions from all source categories would be needed, not more or less from transportation, stationary sources or area sources. The targets discussed represented what is needed from transportation; similar reductions from wood smoke, from industry, and across the board would also be needed.

Mr. Brazil added that, although on-road goods movement represents a small percentage of the VMT, they contribute a much larger percent to the inventory than transportation. Mr. Dawid noted that the ARB is on the verge of passing two truck rules, one for drayage and one for port. It is anticipated their passage will have a great effect on this number.

Mr. Brazil continued, giving numbers on emission trends and targets. In 2006 it was estimated that, per capita, people would use approximately one and a quarter gallons of gasoline per day in 2006 in the baseline situation. To get to the 2035 target, use would need to decrease to six-tenths of a gallon per person per day. In the baseline 2035 situation, the same amount of gasoline would be used, a little less, than 2006, i.e. approximately 1.1, 1.2 gallons of gas per person, in 2035 in the baseline condition. The baseline is almost twice as much as what the target is for CO₂. The regional travel demand model was used to put together these figures. Ms. Drennen asked whether the estimation was based on fuel efficiency. Mr. Brazil replied that it is based on the target, and pointed out that the target is set without taking into account what strategy is used to get there.

In response to Dr. Holtzclaw's question regarding the target in gallons per day, Mr. Brazil state, 0.68 gallons per day, per person in the region.

Ms. Drennen asked if 0.68 gallons per day could be achieved, doing nothing else but fuel efficiency. Mr. Brazil explained that, in addition to the travel demand model, EMFAC

[California Air Resources Board's latest model for determining motor vehicle emission, EMFAC2007] was also used. EMFAC doesn't currently take into account the Pavley standards for CO₂, so ARB has a separate off-model spreadsheet that is used to draw from EMFAC, and calculate proposed reductions from Pavley being in place in 2030, 2035. In this case it was 2035, so that calculation had to be made separately.

Mr. Brazil explained further that owing to Pavley not being law yet, in addition to time constraints, the MTC was unable to provide what are likely to become accurate figures.

Mr. Brazil described policy changes: the Land Use Sensitivity Analysis comprised the land use changes, redistribution of employment growth, and residential use, with an attempt to locate it near transit hubs. Pricing Sensitivity Analysis comprises the carbon tax, congestion fee of twenty five cents per mile, and increased parking charges, which effectively double the cost of driving to discourage vehicle use.

Mr. Brazil outlined the following investment scenarios:

- The Freeway Performance Initiative (FPI), a combination of
 - ramp metering on the entire freeway system in the region
 - more signal coordination on the arterial streets
 - improved incident management
- The HOT lane and express bus scenario that increases to 760 total lanes of HOT lanes in the region - an 82% increase in bus-service hours for the local and express buses.
- The Regional Rail adds
 - six water-transit routes
 - an expansion of the existing rail network
 - high-speed rail

Telecommuting was also included later on, and that represented a ten percent reduction in the number of work trips, based on what had been happening in Marin County. Because of time constraints, telecommuting was not run on the base-case scenario, nor was it run on the ferry/regional rail scenario; only HOT lanes were added.

Mr. Brazil then explained the modeling exercise, the process used to run the scenarios on machines at MTC and the time constraining factors determining the type of investment scenarios explored.

Continuing, Mr. Brazil presented the table "Vehicle Miles Traveled (VMT) by Alternative", which measured in thousands of miles per day the potential outcomes of Investment Scenarios combined with Policy Changes. As an example, the Freeway Performance alternative for the baseline investment box or cell, showed an actual increase in VMT. This was due to freeway enhancement and congestion reduction attracting more travel, and putting more cars on the road – in the baseline condition. The next slide showed VMT per capita. There is an increase in VMT in that FPI baseline box due to a large increase in speed. With FPI, as travel speeds increase, travel time decreases, therefore there is more VMT.

Ms. Drennen asked about modeling with transit speeds. Mr. Brazil replied that speed is taken into account using the travel demand process and the mode-split step.

Mr. Kan commented that the really new element in all three scenarios is the express and local bus component. This component was developed with the region's present operators last year. The size of the region's bus fleet was essentially doubled, and by assuming transit priority measures the running speeds on a lot of routes also improved.

Dr. Holtzclaw asked whether an analysis including both the regional rail improvements and the express and local bus had been made, as a decrease in the amount of VMT will end up increasing the bus speeds. Mr. Kan responded, he would have loved to develop a hybrid scenario, but could not, given time constraints. Mr. Blonski asked whether an optimization model exists. Mr. Brazil responded they have to feed the model the alternative itself. It does not take different combinations and recommend you do it in a particular way.

Introducing the CO₂ Emission Results table Mr. Brazil noted that the two alternatives circled at the bottom do the best, but added that those two alternatives are still over fifty percent over the 40% CO₂ target. The target table is in straight numbers, there is no multiplier applied to the targets table. For the CO₂ emissions table, the multiplier is one thousand.

Dr. Holtzclaw observed that the results are just in terms of VMT. There are also café standards or decreasing the emissions per car by making each vehicle more efficient. And there are also fuel changes: changing to less emitting fuels, like plug-in hybrids, et al.

Mr. Brazil stated that it does take into account Pavley. But the other technology changes with cars like plug-in hybrids, and low carbon fuels, that type of thing – that's not included. But Pavley is. It's actually the *old* Pavley now, because ARB has a new Pavley, Phase II, which was not available at the time the analysis was made. The numbers presented reflect *old* Pavley.

In response to Dr. Holtzclaw's question about "old Pavley", Mr. Brazil explained that it is, basically, an eighteen percent reduction in CO₂ or greenhouse gas emissions in 2020, and a possible twenty-seven percent reduction in 2030. The Pavley Phase II is a small increase from that, but was not included in the estimates. It did not become available until the beginning of the year.

Ms. Drennen asked whether the results of the columns were additive. Mr. Brazil replied that the results are not additive, unfortunately.

Mr. Brazil continued, with the PM_{2.5} Emission Results table, and noted that the best two alternatives are still over 25% over our target. Then for the PM₁₀ target, the results are still over 120% over targets, in the *best* two alternatives. The PM₁₀ targets are very aggressive. To demonstrate what it would take to reach targets, Mr. Brazil presented a table with various combinations of alternatives: gas-powered, electric, plug-in hybrid, and hydrogen fuel cell and the percent fuel economy improvement that would be needed under each scenario.

Mr. Blonski asked whether it is possible to translate the increase in fuel efficiency needed to achieve this improvement into a miles-per-gallon figure for (Pavley-consistent) gasoline-powered vehicles. Mr. Brazil replied that the fuel economy number was something over 50 miles per gallon for all of the vehicles.

Mr. Brazil explained that the spreadsheet tool from ARB just applies those Pavley reductions for those model years and estimates those reductions for whatever analysis you want to look at. The full effect of Pavley will only be felt near 2035, as more cars will be running under the Pavley standards then.

Dr. Holtzclaw asked questions regarding the Alternative Fuel Scenarios for Attaining CO₂ Target table. Mr. Brazil affirmed that putting the information together concisely was not easy. Other interfaces were attempted; however they did not succeed in taking into account the strategies drawn from the vision scenarios. Because all of scenarios are short of the CO₂ target, all of the attainment measures in the table represent the HOT lane/express bus/telecommuting scenario.

In reference to the Alternative Fuel Scenarios table, Mr. Brazil observed that plug-in hybrids appeared to be the best way to approach the needed reductions. Ms. Drennen asked if electric cars would not be better than a plug-in hybrid. Mr. Brazil responded that, of the two, the technology that can get on the road sooner and touch more households is the plug-in hybrid.

Concluding the presentation, Mr. Brazil noted that there is no single “silver bullet” solution, and that an integrated strategy including the following will be needed:

- Pricing in the near term
- Land use changes in the longer term
- Changes in attitude and behavior for transportation
- Technology help

Regarding future work, Mr. Brazil showed a map of the region and its range of CO₂ emissions, along with a summary of items to be worked on and completed going forward. Included were

- Meeting with ARB for additional guidance on using the spreadsheet tool to estimate the impacts from Pavley.
- Individual project analyses
- All-emissions calculations done for individual projects
- Environmental impact report (EIR) for CEQA
- History of the CO₂ footprint map
- Provision of baseline VMT data for local communities to develop greenhouse gas inventories
- Using the travel demand model to project VMT into the future

Ms. Drennen inquired whether the most efficient method of spending regional dollars would be additional investment in the dark green area (lowest emissions per household) or additional investment in the red areas (highest emissions per household). Ms. Drennen ventured that, from a San Francisco perspective, one might get more CO₂ reductions if more money was spent in places that already have the infrastructure to do that, and asked if there is an overall answer to that question. Mr. Kan responded, no geographic cost/benefit analysis had been made, however he felt that the planned project evaluation work might shed some light.

Mrs. Drennen asked Mr. Blonski to lead off with questions for the presenters.

Mr. Blonski asked whether the CO₂ footprint map information solely reflects households. Mr. Brazil responded that it *is* only households, and expanded on the subject of home-based VMT, where one CO₂ emission factor was applied to this VMT number for each zone. Non-home based VMT is not reflected in the map.

Mr. Blonski asked what a stereotypical household in the dark green would look like, versus the dark red, to account for such a difference. Mr. Brazil responded with the example of Antioch in the red area in the east; more affordable housing for families, families who tend to work in the inner urban areas like in Oakland and San Francisco. These are persons commuting every day. Mr. Brazil further noted that the red is always on the outside of the inner urban area, where there is a lot of suburban-type development, and those people are driving in, everyday. Whereas, in the green areas, Mr. Brazil used himself as an example; living in El Cerrito, directly across from San Francisco, and riding BART everyday. Mr. Blonski observed that it reflected lifestyle to some degree. Mr. Brazil pointed out that another driver for that amount of VMT is household income, and autos available, remarking that if people have more income, they have cars – they drive. Ms. Drennen added that in green areas people would also take a lot more non-commute trips by transit, whereas, in Antioch, one might need to drive to the Wal-Mart and back, to school and back, etc. as opposed to walking or taking transit.

Mr. Hilken emphasized that map represents only one part of our CO₂ footprint. Dr. Holtzclaw commented that he liked the map, noting that it shows, for instance, the influence of BART, the influence of Caltrain, as well as the influence of good buses. I think it's really a map that gets you and makes the point.

Mr. Brazil reminded the Committee of the availability of the map and the presentations, and pointed out the website URL:

http://www.mtc.ca.gov/plannin/2035_plan/tech_report.htm

located on the last slide, which has links to the first line technical data summary, and all of the excel tables included in the presentation.

Mr. Kan presented the final slide of his presentation, regarding the call for projects. Partners, congestion management agencies, transit operators, and members of the public, were asked to coordinate the project submittals by March 5th. One of the ideas would be possibly working with the Air District i.e., Henry Hilken and his staff to develop a Regional Climate Protection Program or Campaign. Potentially this climate protection program or campaign could comprise a Spare-the Air/Free Transit transition program; it might include some form of retrofitting, drayage trucks and replacing them at the ports; and it might also include a public education campaign. These ideas will be refined over the next month with the Air District.

In response to a question from Ms. Drennen about the transition program, Mr. Kan replied that the program would conceivably be a transition of the Spare the Air/Free Transit program, moving the focus on ozone precursors towards a more climate change/CO₂-oriented program. Mr. Hilken added that the District and MTC have talked for many years about the Spare the Air program, and had this year begun transitioning to “clean air choices 365 days a

year.” Mr. Hilken stated there will always be Spare the Air days on the hottest smoggiest summer days, when people will be asked to drive less, and not use lighter fluid, etc. There is good name-recognition for the Spare the Air program, it could be transitioned to lifestyle decisions, and having people think about their personal behavior and how they can improve air quality and reduce greenhouse gas emissions 365 days a year. Mr. Kan concluded by reiterating the call for projects deadline, and stated he and Mr. Brazil would take questions.

Mr. Blonski thanked both Mr. Brazil and Mr. Kan for the interesting presentations. Ms. Drennen concurred, especially thanking Mr. Brazil for double duty as a Council member and as a presenter. In response to a question from Ms. Drennen about transit cost reduction/free transit as part of pricing sensitivity, Mr. Kan replied that although at one point having free transit as part of the vision scenario was considered, it was decided against in favor of increasing the cost of driving five times. Through the Spare the Air a free transit program on a per day basis could be extrapolated to 365 days in a year to determine costs. Ms. Drennen observed that administrative overhead costs would be reduced, as there would be no costs for the collection of transit fares; Mr. Kan concurred.

Ms. Drennen replied that she would be interested in seeing a number from MTC for the cost of free transit. Mr. Kan replied that he would try to forward a number to Ms. Drennen. In response to a question from Mr. Blonski, Mr. Kan was unable to recall why MTC decided against free transit as a scenario, but added that increased driving costs had been focused upon. Mr. Blonski offered a carrot and stick analogy, to which Mr. Kan responded that, in a sense, with the HOT bus and regional Rail & Ferry scenarios, the infrastructure is the carrot, and the pricing on the roadside, the stick.

Dr. Holtzclaw opined that the importance of the map from Mr. Brazil’s presentation is that it shows the difference in density, transit infrastructure, and road infrastructure, on influencing lifestyle changes. Rather than people in Berkeley or San Francisco being more concerned about CO₂ or emissions [than people living in outlying yellow and red zones], the infrastructure in those areas simply makes it easier for them; gives those people more alternatives and actually makes it harder to drive. Dr. Holtzclaw felt that because in those [green] areas driving is more expensive, parking scarce, and congestion maybe worse; lifestyle changes in some respects are encouraged or *required*.

In response to a question from Mr. Dawid, Mr. Kan stated that the RTP is going to be adopted in February 2009. Discussion ensued regarding the model, and Mr. Brazil indicated a new tool would be needed to enter the new Pavley standards, along with guidance from ARB regarding fuel economy assumptions employed in travel demand modeling.

Mr. Hilken emphasized that, with the very aggressive targets for PM and CO₂, the best investment, of the three different alternatives – rail/ferry, HOT lanes, and freeway performance – the best one only moves so far toward the target. Mr. Hilken agreed the pricing scenarios are speculative, hypothetical; however, because the targets are so aggressive, the MTC is making a case to build public support, or at least putting the information out there for the public to think about what more might need to be done with pricing and land use, if these targets are going to be achieved.

Ms. Drennen commented, I wanted to take our next step, something new this year, which is “what does this matter to us?” or what impact can this committee have with the information

we just got? Mr. Brazil recalled a transportation land use and climate change discussion at the retreat, and suggested perhaps Mr. Dawid could recommend applications for this information. Ms. Drennen proposed as a topic for the Committee's next meeting, transit funding - both currently and in the RTP - and how the Air District supports it, citing MUNI's ability to present their recent blue ribbon panel findings on innovative transit funding opportunities. Dr. Holtzclaw suggested the Committee look at the Keogh [?] Plan for New York City, an analysis of funding free transit with increased congestion fees.

Mr. Dawid distributed a draft resolution; all individuals present received a copy. Mr. Dawid commented that he felt that Ms. Drennen's proposed step of asking, "What do we do with this?" was crucial, and further opined that the purpose of the Advisory Council is to provide some professional advice to the Board, using the Council members' backgrounds and presentations, the best example of which would be, most recently, the Wood Smoke resolution, which came from the Public Health Committee. Mr. Dawid suggested that what the Health Committee did to Wood Smoke, the Air Quality Planning Committee had the opportunity to do with the generic subject of this pricing new user fees that would go toward public transit.

Ms. Drennen requested from Mr. Kan and Mr. Brazil that the HOT Lane proposal in the RTP be given to all of the committee members, and declared a positive need for the Committee to know what is in the RTP for the HOT Lane issue.

Mr. Blonski recommended that the Committee synthesize out the "carrot and stick" approach, rather than take one particular stance, suggesting the best way to achieve this would be to examine that approach within the context of different programs studied by the Committee, and then bring some of the strategies to the Advisory Council in a synthesized manner, and to then encourage the District to embark on these strategies.

Mr. Hilken replied that in the Ozone Strategy, there are approximately twenty transportation control measures, each one of those having many sub-components, and there is one on pricing; there are a number of different pricing policy ideas. Congestion pricing is one of them. Congestion pricing has long been supported, in addition to other pricing strategies. It is difficult politically, but certainly something that the agency has worked with the MTC on and it is part of the long-range strategy to attain air quality standards. Another thing to be considered is the equity impacts of these pricing strategies. Mr. Hilken stated that analysis shows that that pricing will be an important part of reducing VMT and achieving air quality standards and greenhouse gas reductions; but asked, how do those pricing strategies affect low-income households?

Ms. Drennen asked Mr. Brazil if he had any thoughts, as a councilmember?

Mr. Brazil offered, as an example, the Committee could come up with a specific idea of how to use pricing scenario funds, and suggested that the Committee find ways to augment that, and then develop a resolution or a position to take to the full Advisory Council, and to then have it advanced to the Board.

Ms. Drennen remarked on a lack of good policy with regards to congestion and the HOT Lane issue, as with the equity issue, and suggested that the Committee could play a significant role in developing policy around it, because of its relative newness as a concept.

Dr. Holtzclaw commented that committee members look at the issue from a technical point of view, then evaluate the equity and look at the models; if the models appear to be working right, a certain level of comfort can be extended from the Committee to the Board.

Mr. Dawid asked the Chair whether it would be permissible, prior to the Committee taking this action, to ask the Board of Directors if this is something worthwhile for the Committee to pursue. Ms. Drennen responded that she could ask the Advisory Council Chair to ask the Chair of the Board to find that out in advance.

5. Committee Member Comments/Other Business. *Chairperson Drennen asked the members if they have any comments or questions of staff or other business.*

Mr. Dawid commented that he saw “The Green Guzzler”, a Yahoo! employee shuttle, burning bio-diesel, and enjoyed seeing that.

In response to a question from Mr. Dawid regarding wood smoke refunds, Mr. Brazil replied that those funds were all gone. Mr. Dawid cited a February 4th newspaper item that reported on a \$325 rebate and permit fund being offered to residents in unincorporated Marin County if they replace old and polluting wood burning heaters, and commented that Marin County appeared to have leaped in front, in the Bay Area, in terms of wood smoke. To bring to the committee members’ attention that, while what the Air District is doing is great, individual counties can go far further, Mr. Dawid remarked on a new Marin County ordinance in which the use of wood burning appliances not certified by the U.S. EPA will be prohibited by July 1st of this year.

Dr. Holtzclaw thanked Harold and Raymond for excellent presentations and for their help and guidance in moving forward.

6. Time and Place of Next Meeting. 9:00 a.m., Thursday, April 3, 2008 – 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment. 11:58 a.m.

Jean Marie Mink
Temporary Executive Secretary

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

DRAFT MINUTES

Advisory Council Technical Committee
9:30 a.m., Monday, February 11, 2008

- 1. Call to Order – Roll Call.** Chairperson, Kraig Kurucz called the meeting to order at 9:38 a.m.

Present: Sam Altshuler, P.E., Louise Bedsworth, Ph.D., Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz, Chairperson.

Absent: Robert Bornstein, Ph.D.

- 2. Public Comment Period.** There were no public comments.
- 3. Approval of Minutes of August 26, 2007 and October 1, 2007.** The Committee provided minor revisions to the minutes. After discussion, Mr. Altshuler moved that the approval of the minutes be deferred until Dr. Marc Fisher reviews that portion of the minutes containing his presentation; seconded by Mr. Holtzclaw carried unanimously without objection.
- 4. Update on PM Inventory Development, Modeling and Data Analysis:** *Dr. Saffet Tanrikulu, Research and Modeling Manager and Dr. David Fairley, Statistician; gave a presentation to the Committee on PM inventory development, modeling and data analysis.*

Dr. Tanrikulu, Research and Modeling Manager introduced himself to the Committee and provided his topic of discussion which was the ongoing PM study effort. The study of PM started several months ago and the focus will include the data analysis, emissions inventory development and modeling. Dr. Fairley addressed wood burning inventory improvements after his talk.

Dr. Tanrikulu mentioned that PM 2.5 concentrations exceed $35\mu\text{g}/\text{m}^3$ (current 24-hour national PM 2.5 standard) in the Bay Area. The number of exceedances changed from one year to the next. Since PM 2.5 measurements started in the Bay Area (1999), the concentrations exceeded $35\mu\text{g}/\text{m}^3$ as low as five and as high as thirty seven times.

The expected Environmental Protection Agency (EPA) designation includes:

- The U.S. EPA plans to designate districts in 2009, based on PM measurements in 2005-2007;
- Bay Area is expected to be in non-attainment for the federal 24-hr PM standard ($35\mu\text{g}/\text{m}^3$);
- Bay Area is expected to meet the federal annual standard ($15\mu\text{g}/\text{m}^3$); and

- Purpose of the Air District effort is to understand PM formation in the Bay Area and provide technical information to planners

As part of the on-going PM study, a Chemical Mass Balance (CMB) analysis was conducted using data from the following air monitoring stations: San Jose, San Francisco, Livermore and Island.

The findings of the CMB analysis showed that PM 2.5 in the Bay Area is coming from the following sources or processes:

- 18% of PM 2.5 is from burning fossil fuel (mostly diesel)
- 36% from burning wood and cooking
- 44% from the formation of ammonium nitrate and ammonium sulfate
- 1% from sea salt
- 0.5% from geologic dust
- 0.5% from other sources

Analysis also showed that particulate matter transport from the Central Valley may significantly contribute to the Bay Area's PM 2.5 levels.

The on-going PM study activity includes:

- Collaborating with ARB in the CRPAQS effort (regional inventory development, data analysis and modeling) - \$28 million study over Northern CA
- Developed an ammonia emissions inventory: STI
- Improved emission estimates from wood burning: phone survey
- Studying the relation between meteorology and PM: UCD
- Simulating PM for CRPAQS measurement period (00-01)
- Conducting simulations with the wood burning and diesel PM inventories (06-07) – winter period

December 2006 and January 2007 period was extensively studied. Key finds and observations are summarized below:

- Measurement stations have good aerial coverage over the Bay Area
- In the Bay Area PM does not go to zero, even when it is raining
- PM levels go up and down together over the entire Bay Area stations, unlike ozone
- No single site is consistently higher than others, unlike ozone
- PM 2.5 exceeds the standard for 1-6 days, longer than Bay Area ozone episodes, but shorter than San Joaquin Valley or Sacramento PM episodes
- Most exceedances are in mid 40's, some are in mid 50's, lower than Sacramento and San Joaquin Valley levels
- High PM during Christmas due to above average wood burning
- No clear correlation between temperature and PM
- A strong correlation between PM and rain
- Winds are rarely calm in Bay Area, minimum daily average wintertime wind speed was about 3 miles/hr during the study period
- Low PM, when daily average wind speed exceeds 7 miles/hr

- Winds were mostly from the east during high PM days
- PM build up period was 1-3 days

Dr. Tanrikulu made these points showing various charts and tables. Additional information regarding charts and tables include:

PM 2.5 was plotted from 10 Bay Area stations from November 15, 2006 through February 15, 2007. The PM levels tend to go up and down at all stations simultaneously. Dr. Tanrikulu also stated that there is no single site consistently reporting PM 2.5 higher or lower than others. In terms of the number of days, there are some sites consistently higher than others. Duration for exceedances were as low as 1 day; and as many as 6 days of exceedances, which is longer than the ozone episodes.

Dr. Tanrikulu stated that if you look at the November, December and early January exceedances, that they are in mid to upper 40s. Also, the chart displayed one unusually high PM day, which was Christmas Day. It is believed that this was due to excess wood burning.

Mr. Altshuler commented that there are normally high readings around Christmas and Thanksgiving from wood smoke, but feels that this is mostly due to fireplaces and not from wood stoves. Mr. Altshuler explained that fireplaces are less clean and inefficient and the wood stove is relatively efficient and is not as dirty. Perhaps that the Air District may want to target fireplaces more than just generically wood burning.

Mr. Gary Kendall, Director Technical Services, responded to Mr. Altshuler stating that the Air District is considering this approach, as there were comments referring to that same topic and that there is a possibility that once the final proposal is out for the wood burning rule, it may have a tiered approach with some allowances for the use of EPA certified wood stoves. On nights when one is not allowed to burn in a fireplace, but one may be allowed to use the certified wood stove.

Dr. Holtzclaw asked if the firework particulates are included in the measurement. Dr. Tanrikulu response was yes, and that the PM from all sources is included in the analysis.

Dr. Holtzclaw asked about the location of the PM monitor in San Francisco, Dr. Fairley responded that it is located at 16th and Arkansas Streets. Mr. Altshuler asked about the chemical footprint. Dr. Fairley stated that he used gun powder and while conducting the CMB analysis and that there were some anomalies on January 1st and researched the chemical profile of gun powder and the results were significant on certain days. Mr. Altshuler asked if there were any heavy metals associated with fireworks. Dr. Fairley was not certain when Dr. Holtzclaw asked if this is how the different colors and Mr. Kendall replied that with the PM 2.5 monitors that the Air District has noticed that in the evening, and in the early morning hours after the fourth of July, that if you are looking at hourly measurements the levels go up. The Air District feels that there is a direct correlation between the firework activities and an increase in hourly PM levels.

Mr. Altshuler also asked if he thought this was more toxic and Mr. Kendall stated that he could not comment without the list of metals being used, but noted that metal compounds are used to get the various colors.

Additional slides included:

- Bay Area PM 2.5: Winter 2006-2007 – beige lines minimum temperatures
- Bay Area PM 2.5: Winter 2006-2007 – blue lines amount of rain
- Bay Area PM 2.5: Winter 2006-2007 – blue lines average wind speed; wind average 3 mph
- Bay Area PM 2.5: Winter 2006-2007 – purple lines east winds in Vallejo and Pt. San Pablo; blue lines – wind speed

Dr. Tanrikulu also covered the topic of modeling currently used by the Air District.

- MM5 for meteorological modeling
- CAMx for air quality modeling
- 4 km horizontal grid resolution
- PM emissions from wood burning and diesel combustion (no secondary PM formation)
- Initial and boundary conditions were zero

Dr. Tanrikulu stated that what the Air District is trying to do is find out whether the model is able to capture the main features of PM formation, as this is the purpose of the initial effort. Dr. Tanrikulu indicated that the information noted in the wintertime PM 2.5 emissions from residential wood combustion may be under estimated in both Livermore and Napa.

Comparison between simulation and observation include:

- Simulation is multiplied by 4.5 for the time-series and by 3 for areal plotting purposes
- Good agreement between simulation and observation
- We do not expect one to one match between simulation and observation because of assumed zero initial and boundary conditions in modeling and the use of only emissions from wood burning and diesel combustion

Mr. Altshuler commented on fireplaces versus wood stoves and that the Christmas phenomena is a fireplace and not a wood stove issue. Mr. Altshuler indicated that individuals that have wood stoves tend to use them continuously and fireplaces add the esthetic value that occurs during the holidays.

Future work includes:

- Plan to convert the 2005 CARE inventory to model ready inventory (for primary and secondary PM simulation)
- Evaluate the modeling inventory – several components include ammonia, and wood burning
- Improve meteorological simulations – currently using MM5 and in the future will consider using a different model
- Simulate PM (primary and secondary) using both CAMx and CMAQ
- Study model performance and identify areas need improvements
- Improve model performance

- Simulate emission scenarios under various meteorological conditions to better understand PM formation in the Bay Area and provide information to planners

Dr. Tanrikulu concluded his presentation. Dr. Holtzclaw asked if the Air District is more out of compliance with PM 2.5 and why is there a more severe target for PM 10 than 2.5. Mr. Kendall, responded to Dr. Holtzclaw noting that the state PM standard is 50 and that the National PM 10 standard is 150, and when taking that into account the Air District has a long way to go, in terms of meeting both the annual and the 24-hour state PM 10 standard.

There was extensive discussion regarding the presentation and the weather patterns during the study. Dr. Tanrikulu noted that the weather pattern significantly impacts the weather as a whole. The pattern includes the wind speed, wind direction, humidity and rain fall as it effects PM 2.5 concentrations and transport from the valley and secondary PM formation in addition to the sparse the air tonight calls may be impacting PM 2.5 concentrations.

Mr. Kendall noted that he assumed that the rain washes the PM out of the air, and his staff informed him that we are receiving relatively clean marine air coming in that just does not have as much PM associated with it.

Chairperson Kurucz noted that as the Air District identifies the weather conditions that have the most impact to go back to the past few years and see if they correlate to that pattern. Mr. Kendall noted that because of the 10 years of data at Santa Rosa, the seasonal rainfall is not perfect and it does correlate pretty well, but it does not explain the PM exceedances experience completely. Mr. Altshuler asked if there would be less variability from year to year if all of the bay area stations were not included in the plot to only look at specific cities such as Livermore and Napa, if it would have the same affect. Dr. Tanrikulu replied to Mr. Altshuler informing him that the Air District will use various methods for the best results.

Chairperson Kurucz thanked Dr. Tanrikulu for the presentation.

David Fairley, Statistician thanked the Committee for inviting him to participate with the presentation. Dr. Fairley stated that he will provide information to the Committee to try and improve the emission inventory estimates for wood burning. Dr. Fairley stated that he will show how ARB conducts its wood burning.

Dr. Fairley noted that a survey was conducted and this is what was used to make new estimates. Dr. Fairley stated that ARB estimates woodstove emissions and that it is based on census data where individuals were asked what is their primary source of heat; the response was that 1% of the bay area heats with wood. Dr. Fairley noted that the percentages are based on a survey county by county that was conducted by ARB.

Dr. Fairley stated that the survey was conducted for 22 days starting November 22, 2005 through February 17, 2006. This period covered the highest PM levels. Key questions from the survey were:

- What wood burning device(s) a household had (fireplace, wood stove, pellet stove).
- “Did you burn wood yesterday or last night?”
- “In a typical day that you burn wood, how many hours of the day do you have a fire burning?”

- “In a typical day that you burn wood, how many logs do you burn throughout the entire day?”

Mr. Glueck asked if these same households asked the same questions every day and Dr. Fairley’s response was no, that each household was only asked one day. Dr. Holtzclaw asked if the days were selected randomly. Mr. Fairley responded by informing Dr. Holtzclaw that it was a mixture and that the Air District oversampled weekends and also included holidays.

The information was gathered for the months of November through February and estimates were calculated based on the questions:

- Estimated total daily household hours burned and total daily household logs burned by county for each month Nov thru Feb.
- Also asked:
“Do you ever burn wood in non-winter months, between March and October? *If no, record. If yes, ask: Which months during this period to you tend to burn wood?*”
- → This provided rough estimates for remaining months.

Comparison of survey-based emissions and ARB inventory shows that there is a difference between the estimate based on hours and logs. Dr. Fairley noted that the urban counties seem to have been over estimated by ARB, for example Alameda and San Francisco, whereas Sonoma and Marin Counties were both under estimated. Dr. Holtzclaw asked about the comparison made county by county and if this was compared by percent of the bay area total and if this was close to what ARB determined. Dr. Fairley stated that yes, the determination was based on relative amounts and not absolute. Dr. Fairly did state that the absolute did come close in comparison.

Dr. Fairley provided a summary of spatial allocation which included:

- How to estimate wood burning emissions to smaller geographic areas (e.g. neighborhoods or 4x4 km grids)
- → Use regression analysis to find variables that predict wood burning.

Dr. Fairley stated that the survey provided the zip code of every respondent, so get to the geographic level and to use the regression analysis to compare the amount of wood burning zip code by zip code, with various demographic variables zip code by zip code. They response is the amount of wood burning in either hours or logs and that the independent variables. The data included:

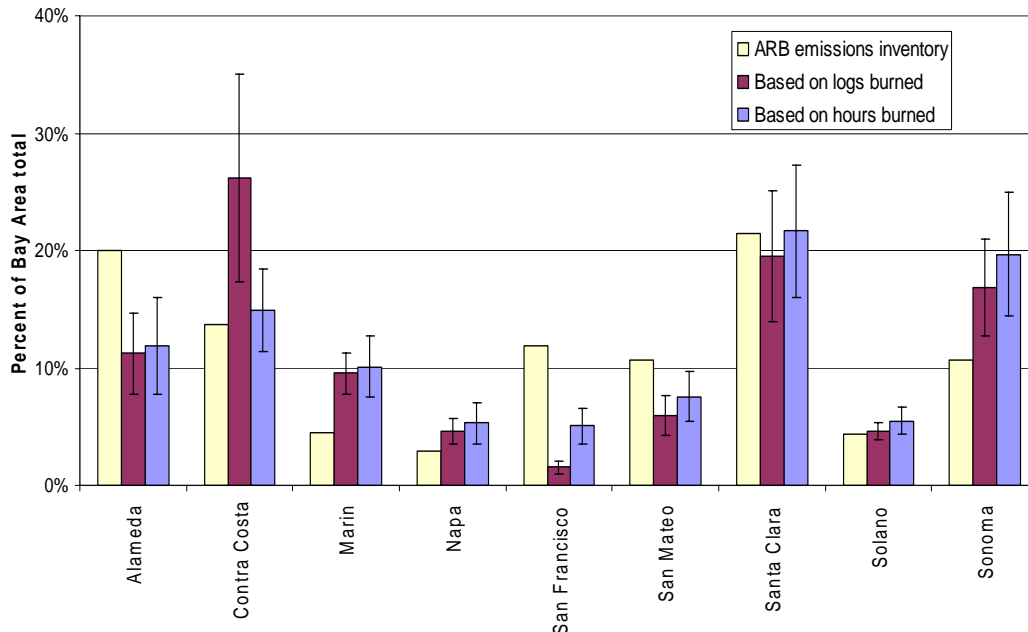
- Response: wood burning rates by zip code (from wood burning surveys)
- Independent variables from the 2000 census: population, # of households, ethnicities, income distribution, occupation, house age, housing type, # of rooms, heating fuel, down to the *block-group* level.

Dr. Fairley stated that the information is down a block group level. The census data is a smaller geographic area in tracts, within the tracts are block groups and within blocks are individual blocks and information was provided block by block. Dr. Fairley clarified for Chairperson Kurucz that census blocks are equivalent to city blocks.

The results were:

Statistically significant variables:

- House type (single-detached vs. apartment)
- % of households using wood as their primary source of heat
- County
- (Without county, income was statistically significant); stating that the higher the income the higher the amount of wood burning



Dr. Holtzclaw noted that it would be expected that lower income people would be using wood burning for heating and also expect that more wealthy homes would use it just for the ambiance. Dr. Fairley responded by stating that wood burning only increase with income, lower income households did not burn less. Dr. Holtzclaw also asked if wood burning for heating increased as well. Mr. Fairley stated that it was only wood burning.

Dr. Fairley concluded his presentation.

Chairperson Kurucz ask Dr. Fairley if he is able to conduct a sensitivity analysis where a variable is removed and see how it would look, for example the natural gas for heating to see what the impact would be if everyone had natural gas service. Dr. Fairley responded that yes, this can be done.

Mr. Altshuler suggested that going forward that there should be a combination of geography and the meteorology. Mr. Fairley responded to Mr. Altshuler and noted that this is something that the Air District will do during the modeling process.

Dr. Tanrikulu informed the Committee that the presentation consisted of 20%-25% of the work completed by the Air District to date. Dr. Tanrikulu also stated that staff has done additional work that was not presented. Also, Dr. Tanrikulu stated that the Air District is also in the process of making some assumptions for the modeling purpose (i.e. what if the Bay Area permits the use of only EPA certified wood stoves and what impact or changes would we see in emissions and what benefit would we see in reducing PM 2.5 concentration and what impact does this hypothetical rule have in the northern area versus the southern area.

Chairperson Kurucz asked if the analysis lead staff to draw any conclusions or direction with respect to the impact of local climate or local climate on particulate matter levels, where climate change would affect how the Air District would comply or attain the standards. Dr. Fairley stated that there are numerous affects of the particles and that there is some progress in the reduction of carbonaceous fraction of PM 2.5.

Dr. Holtzclaw asked if there is any consideration for the same type of modeling and analysis of the ammonium nitrates and ammonium sulfates, pre-cursors, the transport and how it is affected by weather and so on. Dr. Fairley responded to Dr. Holtzclaw stating that this would require a full photochemical model where there is ammonium inventory and includes chemistry, which is the next step and would be quite valuable.

Mr. Glueck stated that the survey did not have the consistency with regard to the number of households that were questioned, but were not questioned on a continual daily basis to identify the patterns, indicated that this would have to affect some of the randomness and that income and temperature did not seem to be a correlation and the emissions that were identified. Dr. Fairley responded to Mr. Glueck that there may be some relation with income, and that it is a surprising one that it appears the higher the income, that it appears the higher the amount of burning.

Chairperson Kurucz noted that in the future this subject matter could be revisited if there has been significant progress made. Mr. Altshuler suggested revisiting the monitoring network for woodsmoke and the COH measurement is very simple means of conducting this, but it is a real time device, to see where some of the exposures are and look at the cities that have actually adopted woodsmoke ordinances ahead of time to see if this is an improvement, and use that city as an example.

Mr. Kendall commented that the COH instruments are no longer being made and that there is a newer device by the name of aethalomometer that would provide useful readings.

Chairperson Kurucz thanked Dr. Fairley.

5. Discussion on Objectives for 2008: *The Committee discussed their objectives for 2008.*

Chairperson Kurucz stated that a memo was sent to the Committee members summarizing their notes from the retreat and asked if there were any corrections to the direction that was

set at that time. The primary agenda for the committee is to explore implications of climate change.

Subtopics will include:

- Synergies and Conflicts of Climate Change and Criteria Pollutant Programs;
- Implications of Fuel Choice; and
- Modeling – Integrated Multi-Pollutant Management

Chairperson Kurucz commented on the speakers scheduled going forward, that Dr. Harley is willing to come to the next meeting and that there could possibly be a conflict, as Dr. Bornstein may obtain a speaker for that same meeting as well, which corresponds with the National Convention that is scheduled and that Dr. Bornstein hopes to get a leading expert who may already be in town. Chair Kurucz asked if the Committee would be willing to extend the upcoming meeting if necessary. Chair Kurucz also asked if there would be additional time needed spent this year to build towards a conclusion and a synthesis of all the information provided, such as modeling, the potential need for additional modeling capability as the Committee decides the impact of climate change and air quality and the relationship with PM. Chair Kurucz asked if the Committee preferred additional meetings or longer meetings, stated that it has been done both ways in the past.

Mr. Glueck asked if there is a presentation update on climate change within the Bay Area and feedback with respect to the emission impacts. The consensus of the Committee is to have an extended meeting.

- 6. Committee Member Comments/Other Business.** Chair Kurucz requested that lunch be provided at the next meeting scheduled in April.
- 7. Time and Place of Next Meeting.** 9:30 a.m., Monday, April 7, 2008, 939 Ellis Street, San Francisco, CA 94109.
- 8. Adjournment.** 12:00 p.m.

Vanessa Johnson
Acting Clerk of the Board

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

DRAFT MINUTES

Advisory Council Public Health Committee
1:30 p.m., Wednesday, February 13, 2008

1. **Call to Order:** Chairperson Kim called the meeting to order at 1:38 p.m.

Roll Call: Janice Kim, M.D., Ph.D., Chairperson, Cassandra Adams, Jeffrey Bramlett, Steven Kmucha, M.D., Linda Weiner, and Brian Zamora.

Absent: Karen Licavoli-Farnkopf, MPH

2. **Public Comment Period:** There were none.

3. **Approval of Minutes of December 12, 2007:** Mr. Zamora moved approval of the minutes, seconded by Ms. Adams, carried unanimously.

4. **Review and Discussion of Final Draft Strategy for Asthma as it Relates to Indoor Air Quality:** Chairperson Kim opened discussion of the ongoing topic from outgoing Chairperson Bramlett. Ms. Adams suggested adding within the Recommendations a group of resources for people with asthma who have no health insurance. Ms. Weiner would like to add the Asthma Coalition to that list – the Regional and Local Asthma Coalition to number one; because she felt they gear themselves toward those residents who are most impacted. Dr. Kim asked if staff had a recommendation about local health departments being an important resource referral. The proposal was made to move the draft recommendation to the Full Council. Ms. Adams moved approval of that proposal. Ms. Weiner seconded. The motion carried unanimously.

5. **Update on the Proposed Regulation 6, Rule 3: Woodburning Devices**

Janet Glasgow, Air Quality Program Manager, Compliance and Enforcement division presented the group with an update on the rule.

- Ms. Glasgow gave an overview on the Air District's Regulation 6, Rule 3: Woodburning Devices, and reviewed the Advisory Council's role in the current process. An update with what is happening in other key Districts regarding wood smoke, and a review of proposed Regulation 6, Rule 3, and issues that came out of workshops was provided. Finally, next steps were covered.
- In December 2006, the EPA lowered the 24-Hour standard for PM_{2.5} from 65 micrograms per cubic meter to 35 micrograms per cubic meter. The Bay Area exceeds that standard on average 20-30 days per year, although this winter's Spare The Air Tonight season just ended on Monday, February 11, 2008, and only two exceedences have been recorded so far. The measurement of monitor stations

does take several weeks; there will be more being analyzed in the next couple of weeks. The largest contributor to wintertime PM is wood smoke. Wood smoke is the largest fraction of PM_{2.5} within the Bay Area, and it is logical to focus our regulatory development and financial resources on such a large piece of the PM_{2.5} pie. In addition, this large contribution occurs primarily during the wintertime, and therefore this is the timeframe during which our rule will focus.

- This committee took the initiative two years ago to research what other districts were doing at that time.
 - The Puget Sound Clean Air Agency and the San Joaquin Valley Unified Air Pollution Control District sent representatives to speak before the committee and work with District staff to share their experiences. Based on those committee meetings and recommendations, the full Advisory Council recommended a multi-pronged effort, specifically phased in over several years, to include rule development, increase public outreach and a District-wide incentivized wood stove replacement program. Following Board approval, staff began work in 2007 on these three approaches. Staff has continued to keep in touch with the two districts which had curtailment programs in place. Many other districts throughout California and the West had woodburning device control measures on the sale and installation end, but only these two listed districts had an actual ban or curtailment on wood burning at that time. Puget Sound has had almost 15 years of enforcement of their two-stage program. Stage I prohibits burning in fireplaces or of uncertified woodstoves at 35 micrograms per cubic meter. Stage II prohibits any burning at 60 micrograms per cubic meter, as forecast, unless it is the only source of heat for that household. Its enforcement program has several options as shown, if they find residents in violation of its rule, they do require enforcement action. They will waive the fine if a noncertified stove is replaced with a certified device.
 - San Joaquin Unified is in its fifth year of enforcing a mandatory curtailment. They utilize the Air Quality Index and use a one-stage approach, as the curtailment portion only is enforceable at one stage. They have a voluntary curtailment, which they call at 100 aqi for PM, and the mandatory curtailment is imposed at 150 aqi. Last winter they had 39 mandatory curtailments, and had up to 50 voluntary curtailments, because they call it by county, it varies across the district, depending upon which county you are looking at. Its curtailment is also based PM₁₀, because they have had it in place before the new standard went into effect for PM_{2.5}.
 - Sacramento Metropolitan AQMD did adopt a mandatory episodic curtailment rule in October 2007, with two different curtailment levels, on top of a voluntary level.
 - South Coast AQMD has been in rule development for over a year. They propose a mandatory curtailment, but only beginning in the year 2013, and it would be only targeted to areas where they have exceedences.

Ms. Glasgow reviewed the provision in Regulation 6, Rule 3:

- Curtailment – no burning – in any woodburning device would be required when PM_{2.5} is forecast to reach unhealthy levels, indoor and outdoor, which is under Regulation 5 at present. Recreational fire was basically defined, not to include food cooking.
 - Exemptions for sole source of heat
 - Exemption for unavailability of natural gas
- Visual limit will be 20% opacity. District inspectors are certified to read the plumes.
- Exemption for startup of a new fire for a period of 20 minutes within any 4-hour period.
- Sale of new or used devices require devices to be
 - EPA Phase II certificated
 - Pellet fuel
 - Masonry heater
 - Approved in writing by the Air District and meet low-mass fireplace emission targets
- Any new construction involving installation would have to meet the same criteria as the sale of any device
- Prohibition of garbage burning, and burning of inappropriate materials, such as:
 - Chemically treated wood
 - Non-seasoned wood
 - Plastic
 - Paint
 - Particle board
 - Pallets
 - Any other material not intended for use in a woodburning device
- Requirement for sale of wood intended for home fire use, to have a moisture content of 20% or less by weigh, with labeling to that effect; and a public awareness statement on that label about curtailment, contact information for curtailment notifications, and health effects of wood smoke.
- Regulations 1 and 5 need amendments for indoor and outdoor residential burning residential heating and recreational fires.

Ms. Glasgow reviewed the Public Workshops that were held, media, and public responses. The concerns reached from these workshops were as follows

- EPA certified woodburning devices and pellet stoves should be allowed to burn during any curtailment period.
- Smaller curtailment areas within the District, similar to San Joaquin's District
- Sole source of heat exemption needs clarification
- Consider a low income exemption related to sole source

- Curtailment threshold needs to be explicit
- How will curtailment be enforced?
- How will the public know when to burn and when not to?
- Could the District require distribution of public outreach information on wood that is sold?
- The labeling requirement for this District would be too costly
- Was the mandatory curtailment provision constitutional?

Next steps, Ms. Glasgow stated that the Technical, Legal, Planning and Engineering staff was evaluating the comments received to find what could be incorporated and what would not. This was expected to be done shortly, as was revisions to the draft regulation; after that, a socio-economic study and CEQA review were anticipated, as was a full EIR, with refinery flare minimization and the toxics new source review rule as precedents. Focus on the EIR for this rule would be on the generation of greenhouse gases resulting from regulating indoor woodburning. An enforcement plan was being developed, as well as outreach for notification purposes and education, in future workshops.

Ms. Weiner asked if there was any language addressing management of rental units' responsibility for enforcement, for low income renters who want to comply, but cannot afford to fix the fireplace in their apartment. Ms. Glasgow responded that more specific exemption provisions were being put into the rule. Dr. Kim inquired whether the public comment period was closed, to which Ms. Glasgow responded that it was. In response to a question from Dr. Kim, Ms. Glasgow stated the regulation would be enforced during the wintertime, as PM_{2.5} exceedances had not occurred outside of that period; however, the visible emission standard would apply all year round.

Ms. Adams inquired what percentage of the 20% limit for off-road would be for construction equipment; Ms. Glasgow indicated she would provide that information, as well as agricultural burning. Ms. Adams asked what the sources were for Ammonium Nitrate and Ammonium Sulfate, to which Ms. Glasgow and Planning Department Director Henry Hilken replied that they are "NO_x" emissions from refineries, feedlots, sewage treatment plants, marshes and industrial sources. The District has contracted to get a specific inventory for the Bay Area for Ammonium, for PM modeling.

Discussion ensued regarding public comments and reporting to Advisory Council in advance of the rule adoption.

Mr. Zamora asked about enforcement being complaint-driven. Wayne Kino was referred to by Ms. Glasgow as the person working on a plan addressing this; Mr. Kino referenced a method of using infrared technology for reading, with a step-by-step approach to enforcement, and noted night-certified inspectors as well.

Dr. Kim asked about opportunities for a hotline to alert inspectors. Mr. Kino responded that some combination would include areas to survey with complaint traffic to alert inspectors. Ms. Glasgow added that enforcement had moved from strictly complaint-based to a hybrid model, incorporating surveillance, in use by other districts more recently.

Mr. Zamora suggested the announcements regarding workshops, if forwarded could be put up on websites.

Mr. Bramlett asked if low income exemptions take into consideration ambient health hazards posed to neighbors. Ms. Glasgow responded that the sole-source exemption originally proposed was misconstrued by many people, and indicated it was being re-written to address the meaning of “sole-source” of heat, and every other consideration would be spelled out individually.

Dr. Kim thanked Ms. Glasgow for her work.

7. Discussion for Possible Topics/Guest Speakers for Future Meetings

A discussion regarding assignments commenced, including the following points:

- CARE report; gather perspective from different stakeholders in anticipation of the report coming out sometime this year.
- Briefing from staff on the CARE program could be scheduled
- Air Resources Board is working on Health Risk Assessment for West Oakland, scheduled for March 2008
- Update in April to the Committee on ARB’s HRA
- Possibility of Health Officer from Alameda County to speak to the Air Quality issues in West Oakland and what the Air District can do
- The Port’s perspective

8. Committee Member Comments/Other Business

Committee members or staff made comments and announcements and asked questions.

6. Time and place of next meeting: 1:30p.m., Wednesday, April 9, 2008, Room 716, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment: The meeting adjourned at 2:40 p.m.

Jean Marie Mink
Temporary Executive Secretary

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

DRAFT MINUTES

Advisory Council Executive Committee
9:00 a.m., Wednesday, March 12, 2008

1. **Call to Order – Roll Call:** Chairperson Louise Bedsworth, Ph.D., called the meeting to order at 9:05 a.m.

Present: Louise Bedsworth, Ph.D., Chairperson, Jeffery Bramlett, Harold Brazil, Emily Drennen, Janice Kim, M.D.

Absent: Kraig Kurucz.

Also Present: Sam Altshuler.

2. **Public Comment Period:** There was none.
3. **Approval of Minutes of March 12, 2008:** Mr. Brazil moved approval of the minutes as amended, second by Ms. Drennen, the minutes carried unanimously.
4. **Standing Committee Chair Reports:**

Air Quality Planning Committee Meeting of February 7, 2008 – Emily Drennen, Chairperson. Ms. Drennen stated that in February there was a fantastic presentation from two individuals from the Metropolitan Transportation Commission (MTC). The presenters were Ray Kon and Harold Brazil, as the both talked about the Regional Transportation Plan (RTP). The brief outline for the calendar was that division policy strategies were to be adopted in mid March. In July MTC is scheduled to adopt a constrained financial investment plan, with the hope of adopting RTP in February 2009.

Some of the goals were to reduce Vehicle Miles Traveled (VMT) 10% from today, and a drop in particulate matter (PM). There was a call for projects on March 5, 2008 so this is where the projects were gathered throughout the region. Ms. Drennen, further stated that Mr. Brazil spoke about Economy, Equity and Environment and its 3 goals of the RTP. The base case from ABAG is a 25% increase in population from 2006 to 2035; a 30% increase in VMT in the same period and a 50% increase in jobs in the same period and this is without doing any and this information was provided by ABAG.

Mr. Drennen further stated that there was an interesting analysis conducted in numbers of gallons of gas per day, per person regionally. At present, individuals use about one and one quarter gallons of gas per person and the target in 2035 is sixth tenths of a gallon. In addition, there were 3 investment scenarios that RTP is reviewing, essentially looking at 3 different ways of looking at it. 1) invest the money through highways and getting more efficiency from the highways; 2) to increase the number of HOT lanes and express buses, doubling their time bus speed; and 3) a regional rail/ferry solution. However, even the best 2 to be used are still 25% over the target for PM 2.5 and PM 10 was 120% over the target. This indicates that there is still some ways to go, even with those 3 different strategies. In the end, it looks as if there will need to be an integrated strategy or pieces of those 3 include increasing the efficiencies of the highways, new congestion pricing, HOT lanes, buses and regional rail. Pricing needs to be changed in the near term, change the land use in a much longer period of time and change the attitudes and behavior regionally, in regards to transportation in over a longer period of time, and technology will help.

Hopefully, the Committee will look at congestion fees in other cities and areas and how they work in terms of reducing air quality and also, and how they are funding transit. Also, the Committee hopes to provide some advice to the Air Quality Board regarding the policy implications of these congestion rules.

Ms. Drennen concluded her report to the Committee.

Chairperson Bedsworth informed the Committee that she spoke to Mr. Broadbent, Executive Officer/APCO with regard to having a presentation for the entire Council on RTP, so that everyone is familiar with the process. Dr. Kim asked about the overall reduction of PM and it being tied to the Air District. Mr. Brazil responded that the emission inventories were generated for the 3 basic pollutants and the analysis that was conducted. The 3 were CO₂, PM 2.5 and PM 10. There were 3 investment transportation system investment scenarios. These were crossed tapped with 3 policy changes, which included land use changes, and pricing strategies that were separate from whatever pricing that was going on with HOT lanes. Overall, there were 18 scenarios that were tested, which included the baseline scenarios. Once the emission inventories were generated, they were all on-road mobile source emission inventories, which included transit vehicles, as rail and ferry was not included.

Mr. Brazil stated that with land use changes there were changes in the travel characteristics, such as changes in speeds, changes in congestion and decreases in VMT. The investment in HOT lane, express bus one can see a shift in motor travels you can see a reduction in VMT. This is where you will see a change in the emission levels for the different pollutants. Mr. Brazil stated that there were some targets that were set by the Governors Executive Order, therefore leaving the horizon year on the RTP as 2035 as this is the half way mark between 2020 and 2050 in the executive order. This is in attempt to get back to 1990 based on 2020 and then give get 80%

below in 2050, so 40% below just with the CO₂, and continue to work with the Air District to establish 10% PM 2.5 and 40% on PM 10.

Jean Roggenkamp, Deputy Air Pollution Control Officer stated that the Air District is very pleased with the efforts that MTC is making and is quite challenging, but it also helps define the policy with transportation choices but with an air quality perspective, in addition to many other perspectives.

Chairperson Bedsworth commented that if none of them meets the target, which strategy will be the best of the three. Mr. Brazil responded to Chairperson Bedsworth and stated that the policy changes were a separate land use scenario change, the other was the pricing change and those were combined and found out that they were still short and added on the 2 additional categories, which included telecommuting to reduce VMT so those 2 were at the bottom. The policies combined with the freeway performance initiative, which includes ramp metering and message board systems, and the HOT lanes, those were the 2 that provided the best results from an emissions perspective. This was the closest to getting everyone getting to the target, but for CO₂ it is 80% over the target and it was even worse for PM.

Mr. Brazil further stated that the PM 2.5 target is easier to get to as that only requires a 10% reduction, but the PM 10 target is a 40% reduction from the 2006 base year level. As this made the scenarios 125% over the target with the best 2 scenarios, as the analysis is just a preliminary analysis, the projects are now being collected that are being submitted to see if these will be included in the RTP.

Ms. Drennen has stated that the RTP is looking at drastically increasing the cost of driving. This would include increasing the cost of driving five times and Mr. Brazil stated that he believes that is double. Ms. Drennen also stated that this is why

Jean Roggenkamp, Deputy Air Pollution Control Officer clarified that the position of the Public Health Officer would need to be considered during budget discussions.

Chairperson Bedsworth moved forward with the list of topics. The topics included information received from council members and from Jack P. Broadbent, Executive Officer/Air Pollution Control Officer.

Going forward Chairperson Bedsworth suggested committee members consider which topics each Committee would consider and the order of consideration. There may be overlap with other Committees. For instance, climate change issues conflict with criteria pollutant goals, which might want to be considered by several committees. Chairperson Bedsworth noted one example that Mr. Broadbent brought up. Specifically, if the CO limit for Stationary Sources was raised, they could operate more efficiently and reduce greenhouse gas emissions. It was suggested that this may

be a good topic for the Technical Committee to discuss. The Planning Committee should think about transportation and land use planning, smart growth issues and how they can be tied together.

It was noted that having presentations given to the Advisory Council as a whole on topics of interest to multiple committees will help to eliminate multiple committee presentations. This possibility can also be thought about in the Committee discussion, but certainly in the follow up discussion. Chairperson Bedsworth requested each Committee Chair develop a regular schedule of meeting dates.

Mr. Blonski commented that from a planning perspective the Committees should identify outcomes that are desirable so that it is not just discussion on a particular topic, but it is working toward a product that can be brought forward to the full Council.

Chairperson Bedsworth agreed and noted that there will be topics that will just be for discussion, but there will also be topics where recommendations will be made and identifying those topics early on and providing a timeline for when the recommendation will be brought forward to the Council will insure that meetings occur on schedule and that the recommendation is made in a timely manner to the Air District. For example, if the Council was to consider the potential gas fee and what the Air District might do with that type of money, then the Council would try and have recommendations from the Council brought forward in the summer, etc.

Mr. Altshuler suggested that more attachments be included with the minutes, as it will make the minutes more complete.

Mr. Glueck has suggested that if there are presenters, to try to get them to provide their documentation as reference to verify the facts or statements made.

Chairperson Bedsworth suggested that guidelines be provided to speakers that may include providing their presentation, as well as providing the Committee with the highlights.

Dr. Kim asked that the presentation also be attached, when there are minutes for approval. Mary Ann Goodley, Executive Office Manager agreed that going forward this would happen.

Dr. Kim indicated that she was not aware of a template being circulated with regard to the goals and objectives and Chairperson Bedsworth commented that it was only a discussion. It was noted that the Executive Committee would work to formalize a memo of some sort to provide to speakers.

- 5. Committee Member Comment/Other Business:** Mr. Blonski asked how the information should be recorded during the breakout session with the respective

Committees. Mr. Kurucz responded by informing Mr. Blonski that the information would be reported after the breakout session.

6. Time and Place of Next Meeting: 9:00 a.m., May 14, 2008, Conference Room 716, 939 Ellis Street, San Francisco, CA 94109.

7. Adjournment: The meeting adjourned at 9:50 a.m.

Vanessa Johnson
Acting Clerk of the Board

Bay Area Air Quality Management District
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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 base-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 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 that was being considered by the MTC.

Ms. Drennen concluded the report and 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.

4. 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

And 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. Rau [sp?], 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.

The following slide depicted wood smoke as a significant contributor to PM_{2.5} loading, and overlaid it with the 24-hour national standard of 35 micrograms. Mr. Wee opined that without a wood smoke regulation, there would be no possibility of attainment.

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 NO₂, 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 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 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, 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 made some press 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:
 - a. The sole source of heat exemption
 - b. 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:
 - c. EPA Phase II devices
 - d. Pellet stoves
 - e. Masonry heaters
 - f. 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 expediently.

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 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 an overview of the 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, TFCA Program at \$43 million per year, and bonds for the Goods Movement Program and infrastructure. Mr. Broadbent stated that out of \$250 million over four years, the Air District will receive a total of \$35 million. 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

2. 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 commented that a Public Health Officer was needed. 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. Bunger and Mr. Broadbent replied to a question from Ms. Weiner, that greenhouse gas (GHG) fees would be 4.2¢ per metric ton. Jean Roggenkamp also responded, saying that the information could be found in the Regulation part of the Air District website.

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 has accepted a position in Public Health, 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.

There was brief discussion of various topics: other fees for climate protection—one stationary and one mobile source, a 10¢ total gasoline increase, the need for Executive Committee review of Altshuler resolution, and public accessibility of meetings.

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

BAY AREA AIR QUALITY MANGEMENT DISTRICT

Memorandum

To: Chairperson Hill and Members
of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 3, 2008

Re: Production System Project Update

RECOMMENDED ACTION:

Receive and File.

DISCUSSION:

Staff will present the current status for this multi-year project, and a description of the next milestones. In December of 2006 staff presented a plan for implementation of the new production system and replacement of IRIS and Databank. At that time, staff indicated that execution of the plan would be accompanied by detailed reports on the status of actual costs as compared to projected costs, and by detailed reports on the status of actual accomplishments as compared to projected accomplishments. The last update was presented in December of 2007.

BUDGET CONSIDERATION/FINANCIAL IMPACT

No impact.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jeffrey McKay