

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

APPROVED MINUTES

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

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

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

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

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

Ms. Goldblatt discussed the following topics:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

/s/ Mary Romaidis
Mary Romaidis
Clerk of the Boards