

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

APPROVED MINUTES

Advisory Council Special Meeting
10:30 a.m., Wednesday, February 11, 2009

Call To Order

Opening Comment: Chairperson Brazil called the meeting to order at 9:05 a.m.

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

Absent: Kraig Kurucz and Virginia Smyly

Others Present: Vice Chairperson Wagenknecht and Director Shimansky

Public Comments There were no public comments.

CONSENT CALENDAR

1. Approval of Minutes of January 14, 2009 Advisory Council Meeting.

Committee Action: Dr. Holtzclaw moved to approve the minutes of January 14, 2009; seconded by Ms. Drennen; carried unanimously without objection.

OVERVIEW

2. Community Air Risk Evaluation (CARE) Program Overview

Presenter: CARE Program Manager Phil Martien

Objectives of CARE Program:

- Evaluate regional and community cancer and non-cancer health risks from ambient toxic air contaminants;
- Identify sensitive populations
- Focus health risk mitigation measures on locations with higher risk levels and sensitive populations

Inventory of Toxic Air Pollution Emissions

- Entire Bay Area – 2005
- Cancer and non-cancer Toxicity-Weighted
- Diesel Particles constitute 86% of risk

Model-Estimated Cancer Risk

- Emissions fed into air quality model to translate emissions into concentrations
- Expected cancer incidents per million people – 70 year exposure
- Modeled concentrations weighted by health risk of each compound

Demographic & Health Data

Mindful to reduce emissions for:

- Population under 18
- Elderly populations
- Low Income family populations
- Asthma hospitalization rates

Measured Trends in Toxic Air Contaminants

- Shows risk reduction
- Bay Area average cancer risk is decreasing
- Risk in some locations is high compared to average
- Local measurement studies are being done
 - regional modeling
 - demographic & health data
 - community input

Local Studies and Measurements

- West Oakland health risk assessment done on local-scale modeling
- West Oakland trucks dominant source of cancer risk
- Uncertainty with numbers of trucks and where trucks were traveling
- Traffic survey conducted – West Oakland Environmental Indicators Project
- Working to develop a measurement study – saturation monitoring
- Through evaluations, 6 impacted communities identified (and incentives funding):
 - Concord (\$68,000), Richmond (\$1.6M), West Oakland (\$7.5M), East San Francisco (\$1,305,000), East Oakland/San Leandro (\$825,000), and San Jose (\$800,000)

Community Outreach:

- Two rounds of community meetings in impacted areas in 2008
- Discuss community concerns
- Seek input on projects to fund through the Air District's Grant and Incentive programs
- Provide community-specific information on toxic air contaminants and emission reductions
- Collaborate on local studies

Liaison with County Health Departments:

- *Bay Area Health Inequities Initiative (BARHII)*: Attend and present at data work group meetings;
- Alameda: Discuss West Oakland Health Risk Assessment findings and implications
- *Contra Costa*: Participate in Forum on Cumulative Impacts of Pollution and transfer CARE emissions & modeling results.
- *San Francisco*: Review technical findings in support of legislation to reduce health impacts from traffic-related air pollution
- *Santa Clara*: Participate in Public health discussions at meetings on General Plans and Climate Change.

Land Use Considerations in Risk Reduction:

- Transportation is the largest source of ozone precursors, particles, toxic air contaminants, and greenhouse gases;
- It is critical to coordinate land use, transportation, and air quality planning to minimize impacts
- Continue focusing grants, outreach, monitoring and enforcement
- Collaboration with local officials is critical
- Develop targeted regulations – indirect source rule
 - Address impacts of growth on both regional and local air quality
 - Reduce greenhouse gas emissions from land use
 - Support and implement CARE program goals and priorities

Advisory Council Comments/Discussion:

Hayes: Questioned trends with asthma hospitalization rates. Martien: Tends to go up – counterintuitive in terms of regional trends seen in air quality; more to it than ambient air quality.

Hayes: Questioned whether higher asthma hospitalization rates coincided with higher population densities or something else; to be covered by Dr. Iton.

Drennen: Questioned examples of successful projects funded through CARE. Martien: Those that reduce diesel emissions, large emission reduction projects also seen from cold iron and ship plug in's to electrical grids.

Martin: Alameda County asthma hospitalization trends have been flat or declining recently.

Bornstein: Questioned and confirmed that improvements related to both toxics as well as criteria pollutants. Confirmed a 7% reduction in cancer risk per year and previous data may not have included risk from diesel particulate.

Holtzclaw: Requested overview of truck clean-up requirements. Martien: ARB regulation requires diesel PM reductions and NOx reduction for all on-road trucks.

Lerma: Questioned if studies done for indoor air quality were being integrated. Martien: Indoor air quality and sources proposed to be focused in third phase of CARE program.

PRESENTATION

3. Air Quality & Public Health Issues in Alameda, Contra Costa, San Francisco, and Santa Clara Counties

A. Alameda County

Anthony Iton, MD, JD, MPH

Health Officer & Director of Public Health

Dr. Iton introduced Bob Prentice, Executive Director of the Bay Area Regional Health Inequities Initiative:

- Group formed of 8 Bay Area counties and one city who work together to determine new ways of public health practice
- Addresses underlying structural issues that lead to adverse health outcomes in populations that are vulnerable and disenfranchised.

Challenges:

- To work with the Air District to avoid viewing air quality in isolation and work to change the larger context of health;
- To recognize that the concept of cumulative and synergistic risk
- To identify opportunities to work across disciplines to create policies and practices that fundamentally alter power dynamics;
- To develop a participatory practice that meaningfully involves impacted communities in the policymaking process.

Dr. Iton presented a framework for health equity that helps guide public health practice; strategies are to change what individuals know about health, review genes and improve access to health care:

Upstream:

Discriminatory beliefs; institutional power; social inequities

Downstream:

Risk factors & behaviors, disease and injury, mortality

Mortality Data Presented:

- Address level data collected
- Death certificates collected/analyzed
- Respiratory disease mortality rate
- Coronary heart disease mortality rate
- Cost of being poor in Alameda County measured by death
- Of top five highest mortality census tracts in Alameda County, 4 are in West Oakland

Hospitalization and Morbidity Data Presented:

Asthma ED visit rate

Childhood (<5 years) asthma ED visit rate

COPD Ed visit rate (asthma not included)

Coronary heart disease hospitalization rate-zip code level and by neighborhood level

Congestive heart failure hospitalization rate-zip code level and by neighborhood level

COPD hospitalization-zip code level and by neighborhood level

Health Costs of goods movement in San Francisco Bay Area:

Annual cost of air pollution from freight transport in Bay Area: \$153 million – for every dollar invested in mitigation, \$3-\$8 in health costs can be avoided:

- 18 premature deaths - \$151 million
- 13 hospital admissions \$497,000
- 284 asthma and other lower respiratory symptoms \$6,000

- 5,100 acute bronchitis \$10,000
- 1,650 lost work days \$320,000
- 17,875 minor restricted activity dates \$1.1 M
- 5,042 lost school days \$471,000

West Oakland Statistics:

- Highest mortality, lowest life expectancy
- Cumulative and synergistic toxic burden
- Enormous burden of chronic disease

Goal:

A healthy economically vibrant sustainable community in West Oakland
 -with good jobs, housing, education and clean environment

Institutional Power:

Institutions play a powerful role in changing the conditions in neighborhoods.

Institutional Practices:

- Work collaboratively and strategically with other institutions to create affirmative policy that recognizes and repairs injustice
- Recognize power imbalances which require the translation of research and work in a manner that is explicitly designed to bring community along in the process
- Understand our mandate in the context of the broader responsibility to protect vulnerable populations from harm

B. Contra Costa County
Wendel Brunner, MD
Director of Public Health

Presentation/Discussion:

- Relationship between Contra Costa Health Services and Air District – Actions to control and regulate air pollution, improve air quality
- Met in low income communities in response to a refinery explosion
- Met with communities subsequently; education on laws and regulations of the Air District
- Formed environmental justice projects with Health Services, coordinated work with Hazardous Materials Commission and Environmental Health Advisory Board
- Air District adopts first refinery flare control rule in nation
- Working with the City of Richmond to implement a Health Element for their General Plan
- Need to incorporate a variety of data sources to develop and promote support, good land use planning and good local land use policies
- Green Ports Initiative and the need to be more aggressive with port emissions controls, mitigate costs and health impact from goods movement at ports and throughout communities

C. San Francisco City & County
Rajiv Bhatia, MD, MPH
Director of Occupational & Environmental Health

Dr. Bhatia introduced Tom Rivard, MS, REHS, San Francisco Department of Public Health, co-author of *Air Pollution Hot Spots: Unregulated Health and Environmental Justice Issues in the United States*.

Environmental Justice Gap:

- There are gaps in air quality monitoring and regulatory approaches that create environmental justice and health harms—enforcement and need for new regulations.
- Focus on CARE program on cancer and air toxics leaves a big gap in focus on criteria air pollutants, hot spots and environmental justice issues.
- Air District acts under its regulatory capacity to fill environmental justice and health gaps.
- In dealing with sources of air pollution, health problems are solved-trucks in West Oakland causes variety of problems.
- Kinds of patterns of disease and relationship with social conditions are the same regardless of county.
- Cannot blame all health burden of inequity on air pollution.
- Current regional monitoring system that drives almost all air quality control efforts is based on monitors that do not capture that variation.

Health Impacts of living near busy roadways

- School children at schools in proximity to high volume roadways experienced more asthma and bronchitis symptoms, more hospitalizations, and reduced lung capacity
- CARB determined that 10 ug/ m³ change in long term exposure to PM 2.5 is associated with a 10% mortality from all causes; these effects occur above and below current air quality standards
- Air toxics produced by vehicles are carcinogens

Assessment Methods are available for Air quality Hot Spot Assessment

- Relocation or addition of air quality monitors
- Portable monitors
- Air quality dispersion models – EPA approved which could, from traffic and wind data, what air quality levels are near freeways
- Dose response functions for pollutants and health effects

Dr. Bhatia presented example of modeling vehicle PM 2.5 using CAL3QHCR during CEQA review of projects at Harrison and Beale Streets, San Francisco and I-800, West Oakland. Requirements were called for all residential projects built in a potential hot spot – Air Quality Assessment with mitigations.

San Francisco's Law for Traffic Pollution Hot Spots (HC Article 38)

- Identify areas with potential conflicts through Roadway Exposure Zone Map
- Establish a PM 2.5 based action level for mitigation

- Conduct site specific air quality modeling
- Mitigation via building design or engineered ventilation to remove 80% of outdoor PM 2.5
- Notification to buyer
- Maintenance requirements
- New San Francisco roadway exposure zone map and hot spot map as part of local ordinance.

Design and Mitigation Alternatives to Prevent Hot Spot Health Effects

- Relocate project away from traffic
- Relocate traffic, especially truck routes
- Design project to minimize use of automobile
- Locate air intakes away from traffic
- Include filtration

Value of a Precautionary Approach

- Compliance with planning goals to prevent air quality impacts
- Protection of children's health and development
- Reduced medical and hospitalization costs
- Environmental justice
- Compliance with noise laws; increased traffic safety

Causes of Variations in Urban Air Pollution Exposure:

Truck routes, urban canyons, restaurant exhausts, construction and demolition, diesel generators, recycling and waste handling, and inadequate building ventilation

Air District Actions that Could Support Public Health:

- Place ambient air quality to capture the variation of regional exposure.
- Provide finer grained air pollution exposure data to county health departments so that they can conduct epidemiological investigations.
- Update the guidance for environmental review of air quality impacts to ensure adequate assessment and mitigation of air quality land use conflicts.
- Ensure hot spot analysis is conducted for regional projects (e.g. freeway expansions)
- Consider the San Francisco ordinance as a model regional ordinance.
- Conduct monitoring studies in urban sub environments to identify priority needs for land use planning, building design and building retrofits.
- Support container fees at the Port of Oakland.

Dr. Bhatia said in closing, the San Francisco Bay Area Health Impact Assessment Collaborative involves San Francisco Department of Public Health, UC Berkeley HIA Group, Human Impact Partners and the Health Development Measurement Tool.

D. Santa Clara County
Marty Fenstersheib, MD, MPH
Health Officer

Background - Santa Clara County

- Most populous county in the Bay Area-over 1.8 million residents
- City of San Jose-largest in Bay Area and 10th largest in U.S.
- 15 cities

Transportation Profile:

- Limited mass transit infrastructure – Light Rail, Cal Train, Bus System
- Nearly 1.2 million autos (25% of Bay Area)
- 262 miles of State highways
- Total miles traveled remains same, with slight decrease due to gas prices
- Numbers of rides per capita and change in revenue hours on regional transportation systems represents a 2%-2% increase over the last few years.
- Majority of people commute along in vehicles

Dr. Fenstersheib presented those at risk for exposure to TACs as people living closest to freeways, lowest income population, commuters spending extended time in their vehicles.

Public Health Benefits of Reducing Vehicle-Related TACs:

- Reductions in particulate matter-decrease in premature deaths due to asthma, cardiovascular disease, and lung cancer
- Premature deaths linked to particulate matter-currently at levels comparable to deaths from traffic accidents and second-hand smoke

Secondary Public Health Benefits of Reducing Vehicle-Related TACs:

- Greater use of transit, reduced usage of cars, and compact development
 - Connection to physical activity levels and obesity rates
 - Lower rates of injury and death due to car crashes
 - Access to clinics, grocery stores, schools

Santa Clara County Government Initiatives:

- Santa Clara County Climate Action Team
 - Eco Pass Program Commute survey and education of county employees
 - County fleet-purchase of hybrids and low emission vehicles
- Public Health Chronic Disease & Injury Prevention
 - Working with city planners on incorporating health into general plans
 - Traffic Safety Communities Network-identifying safe routes to school

Recommendations for Collaboration with BAAQMD:

- Improved communications with Public Health Department
- Additional TAC data
- Support Health Impact Assessments
- Collaborate with resources

PANEL DISCUSSION

4. Air Quality & Public Health Issues in the Bay Area

- Osborne: Questioned why no data for Marin County regarding asthma hospitalization risks in CARE presentation. Martien: Air District did not generate data; Marin not available in data provided.
- Bard: Suggested panel information be entered into testimony for Air District's CEQA guideline update process and the Clean Air Plan 2009 process. She questioned what percentage of the CARE program is dedicated to enforcing near term solutions that we know will have impacts today.
- Martien: The data from CARE program today is used to start implementing measures, including enforcement of trucks in impacted communities and continue to develop new sources of information as it is gathered.
- Broadbent: Through CARE Program efforts, the Air District is developing and implementing a CARE mitigation plan which will include dealing with land use decisions, or the indirect source regulatory initiative. The Board discussed this at their recent Retreat and a working group will be convened to develop the plan which will address disparate impacts.
- Martien: The Air District wants to develop an ISR that addresses both the impacts of developing outside core urban areas while being mindful of not putting people at risk. The Cumulative Impacts Working Group will help to provide input into developing those regulations.
- Dr. Bhatia: UC Berkeley program – completing a health impact assessment of the Port's impacts on health that go beyond truck related diesel impacts study that CARB did. Diesel idling rule is enforceable by two Port police officers and by CARB officers.
- Iton: Held asthma clinic at the Port of Oakland on February 10, 2009. The burden for using clean technology for independent truckers is expensive and they are a low income, immigrant population. Concession model has been adopted by the Ports of Long Beach and Los Angeles and encourages Port to contract with trucking companies to provide capital to upgrade truck fleets and quickly reduce diesel emissions on the communities.
- Shimansky: Referred to Dr. Fenstersheib's comment on budget cuts and asked for comment.
- Brunner: The role of public health has expanded to focus on environmental problems impacting health. In review of traditional public health and funding streams, it is difficult to move agencies to address new and more urgent public health problems for the community. There is a need to look at the focus of public health. The Air District is dealing with some of those key issues. He supported Air District being more aggressive in requiring ports to develop and implement plans.
- Iton: Budget is challenge in Alameda County; engaged in strategic planning process to involve community in what they want in a public health agency. They are

- reorganizing and developing resources to focus on work. Public health is funded by the federal and state government; other funds must be sought and the ability to work on certain areas is constrained. People are working in communities and analysts structuring their local policy agenda to address inequitable policies. We recognize the need to partner with the Air District and others to create a united front around imbedded issues; we need to change the power dynamics to make a difference.
- Bhatia: San Francisco Health Department is part of a large health department, they run a hospital, have a long-term care facility, provide mental and behavioral health services, facing a 25% general fund cut, and their model is that the polluter pays for assessment and compliance activities. 80% of revenue is from business regulation. They can ultimately get fee for service support or regulatory license fees, which are a small piece, but dialogue should extend to public health directors and also to environmental health directors who have a more historical responsibility for environmental quality issues.
 - Fenstersheib: PM 2.5 hot spots are largely industries and busy roadways; thinks air quality analyses should be done of all new sources, look at environmental justice and hot spot impacts and also impacts on regional air quality and start to outline alternatives. General Plans serve to park new ideas; he suggested an Air Quality Prevention Element for general plans possibly be offered.
 - Iton: The concept of cumulative impacts should be included in EIR's.
 - Bhatia: Must anticipate every barrier in formulating EIR's; must do the analysis and including the significance evaluation and outline of mitigations and alternatives. Comments must anticipate kinds of response from agencies.
 - Fenstersheib: EIR's don't always add the health impact specifically; health impact assessment should be incorporated into the discussion of an EIR.
 - Bhatia: Under California law, a mandatory finding of significance is an adverse direct or indirect health impact related to a change in the environment and an EIR must be written. The EIR must include a discussion of public health and safety effects of physical changes in the environment. In recent Bakersfield case, the Circuit Court found it was not enough to simply study the air quality impacts; they also had to study the health impacts of those air quality impacts in order to have a complete and adequate EIR.

Public Comments:

Margaret Gordon, Port Commissioner, spoke of the need for buffer area between the Port and communities, permitting of mobile sources, enforcement of shipping companies, policy to review cumulative health impact assessment and mitigation, and permits to be reviewed by local Public Health officials.

Sam Altshuler spoke on physics of air pollution, suggested adding noise pollution within jurisdiction of the Air District, said Advisory Council looked at PM 1 and .1, and encouraged delving into lower levels which will identify greater health impacts per unit of pollution put into the air.

Karen G. Pierce, Bayview Hunters Point Community Advocates, recommended that the Air District promulgate target regulations related to mobile sources and biodiesel.

Wafaa Aborashed, Healthy 880 Communities, suggested better involvement with Public Health Officials, discussed transfer of pollution and impacts to communities surrounding freeways, asked for focus on land use permitting, cumulative impacts, and public health for schools.

Marie Harrison, Green Action, requested political influence and policy be used to improve air quality.

Linda Weiner, Bay Area Clean Air Task Force, urged individuals to watch “Unnatural Causes”, said Senator Lowenthal is returning the former container bill; SB 974.

Key Questions/Efforts to date:

Targeting grant programs, enforcing mobile source air toxic control measures by CARB dealing with truck idling, drayage truck rule, launching of an indirect source rule, stationary source permitting, protecting sensitive receptors in communities.

Potential Next Steps/Additional Steps:

Broadbent: Questioned additional steps the Air District should take as an organization, given regulatory authority and resources. Concern: Recommendations only a part of a larger, complex situation:

- Work with the Public Health Departments to engage in testing;
- Research how and where health related impacts are occurring on a micro-scale level;
- Identify additional steps.

Iton: There has been an evolution in understanding how to address health disparities. It implies that they are static and our job is to try to mitigate them. They are largely predictable based upon structural inequities we see in communities. There is a tendency to narrow their inquiry to particular area of specialty and to ignore the underlying structural issues; a disproportional amount of power between constituencies. Their practice is to try to address overt issues like levels of air pollution and regulatory strategies to reduce pollution across the board, but also to look at ways of changing the power balance. It requires:

- Explicit focus on increasing the power of the communities that are disproportionately impacted by this;
- Hold yourself more accountable to communities;
- Translate resources and information in ways they can understand and apply;
- Resources are needed to do this.

Iton supported work with the Air District and long-term strategy to change how public health in the local community is practiced; A clear area in which we can make a difference is looking at data in very small areas.

Brunner: Recognized limited resources, the idea of data pushing policy whether or not you have legal mechanism is important, focusing attention on an issue can be an intervention and lead to policy that is more focused. They are trying to develop the Health Element in Richmond in a way

that identifies different pollution sources and working with Air District staff that has expertise on data and modeling. Irrespective of regulatory mechanisms, they can use this to drive local policy. Many factors contribute to hospitalization other than the amount of asthma people have; it is a measure of access to quality and outpatient care.

Bhatia: Specific CARE Program points:

- It has some important gaps;
- There are hot spots in the several districts of San Francisco and a large population of low income people not part of the CARE program;
- Toxic air contaminants have been a very hot button issue;
- There is a lot of exposure to PM 2.5 and ultra fine PM;
- He questioned if it was too messy to deal with a pollutant that is the subject of national ambient air quality standards;
- Possibly open Pandora's Box because there are important gaps in the monitoring system that we are not controlling.
- Or, because of important political drivers, he suspects the fear of cancer has a lot to do with drivers.

Specific Recommendation:

- Look at other pollutants. PM 2.5 is a toxic air contaminant and we should do an assessment for that pollutant, as well as NOx.
- It is good to look at emissions, but we should look at exposures. There are different distances. More dense communities are going to have a higher burden. Need an air quality monitoring system for the criteria air pollutants that get to the importance source of the regional bay area; freeway residential areas should get monitoring systems.

Many comments had to do with regulating mobile sources, truck distribution centers and land use. The Air District has some current legal limits in doing this. The environmental review process is one of the strongest hooks the Air District has to intervene in the process. CEQA provides a tool and instrument both for informing the agencies that own them, as well as informing the public. He concurs with making data publicly available, but it must be comprehensive data.

Fenstersheib: Key first step: Stronger collaboration with the South Bay that improves awareness, resources and grants, use and improve the data, begin to educate the community about the importance of what is in the air, and raising the level of awareness to policy makers.

Advisory Council Comments:

- Sarah Martin-Anderson: Interested in knowing limitations or success stories with the land use planning community and transportation planning community around the idea of General Plans.
- Bhatia: The work around assessment and mitigation of planning new residential uses near roadways was very successful. Ordinance was supported because the developers knew if they were selling units near freeways, they need to provide some measure of protection and reassurance and this was a feasible solution. On the other hand, comments made to Caltrans to study the hot spots, look at how expanding a roadway will increase traffic,

increase pollution which will outweigh any efficiencies occurring with new regulation. There will be a net increase in pollution over time. Land use is suffering because of our transportation system; we are culturally dependent on cars and those two things have to be attacked simultaneously.

- Drennen: Questioned how AD can expand on the hot spot analysis done in San Francisco or do innovative programs like this.
- Bhatia: Baseline monitors show regional averages; the simplest way to look at hot spots are using dispersion models. Inputs are meteorology and traffic volume, traffic speeds and CARB emissions factors. Even though models have been tested and used in other countries for such purposes, we will need local validation studies and strategically locating new monitors.
- Drennen: The Air District has regulatory ability and ability to levy fees and pass those back to communities. She questioned new car registration fees to go back to transit operations and new truck registration fees that would go back to the CARE program.
- Brunner: Suggested tax on gas or a VLF fee, which could drive good public policy.
- Iton: Thinks there is no other public agency that works better with communities than Public Health Agencies; relationships of trust historically; nature of work requires community accountability. He suggested sharing fees with public health departments to facilitate engagement of communities in these issues; translation of scientific information into information that communities can use effectively, and fund Health Dept. staff to participate in these processes.
- Drennen: Suggested hiring an Air District Public Health Officer through Public Health Department Agencies.
- Brunner: Thinks Air District has expertise and has done a very good job in collaborating with the community in Contra Costa County and the Health Departments; supported partnership.
- Broadbent: Agrees, there are often cultural differences, success varies, it is something the AD is committed to and are contemplating proposing to the Board of having a Public Health Officer as part of the staff in the next budget session.
- Fenstersheib: Public health functions well as a convener-would welcome strong partnership.
- Hayes: Supports Public Health Officer and partnership with Public Health Departments. Questioned what pollutants are most important as a priority to obtain the greatest gain in public health.
- Iton: Suggestion to continue to collect data and ascertain policy strategies that will change data, correlate hospitalization data and emergency room data to whatever exposure data they can acquire; notion of constructing a gradient to show how things like a buffer could be used.
- Bhatia: The Air District's driver should be public's priorities and science and not the economic priorities of the regulated businesses. There is enough science and intuition to act. Translation issue is important because at the end of the day, politics prevent the airing of good policy recommendations. The CARE model might learn something from a participatory research model in terms of achieving goals.

- Margaret Gordon: West Oakland has community engagement with EPA through the Community Air Renew Evaluation Grant (federal grant). Community set up a pre-planning process with EPA to develop a larger collaborative. The community had EPA meet with them along with AD, Public Health, CARB and the City and businesses to advance the priorities of the community; be able to understand the science in relationship to planning and to advocate and understand research. This is the only collaborative she knows of like it in northern California; suggested its template be used as a model for communities.
- Jane Martin: Asked Dr. Bhatia about the gap in air quality monitoring and she felt there was also a gap in health risk assessment as it is done for the West Oakland Health Risk Assessment and other permitting. The focus is mostly on the risk of cancer and other illnesses and not focused on mortality. The emerging literature is on the risk of the impact of PM 2.5 on mortality, so it seems like the practice is not keeping up with the science.
- Bhatia: The main gap with West Oakland Risk Assessment was not considering exposure cumulative. It did not add diesel engine PM; it looked at non-mortality and mortality impacts from PM 2.5 but only if they came from diesel engines. The freeways and commuters are generating a lot of PM 2.5 and this was not added to the diesel freight route PM 2.5. In the bigger picture, the gap in the Health Risk Assessment is to call it an assessment when you only look at air pollutant impacts. Health impacts are from noise and other sources.
- Martin: Questioned estimated impacts on mortality as increased by recent CARB research from 6% to 10%.
- Bhatia said there was a consensus process that CARB went through. It brought the best scientists in the world on long-term fine particulate exposure and long-term mortality and found that relationship was roughly 10 micrograms of change in PM 2.5 fine particulate equated to a 10% change in mortality all the way down to 5-7 micrograms. There was a range of estimates before that. Michael Jared's work in Los Angeles looks at intra-urban variation in a region like this, and the relationship is more like a 14% change in mortality with a 10 microgram increase in PM 2.5. The point is there is a consensus document at CARB on this dose response curve, but the fact is, we are not applying it right now.
- Holtzclaw: Focus on the politics—Get the State and MTC decision-makers to use money more effectively instead of widening freeways.
- Iton: This is a struggle of interests and balance of power; it only changes when you introduce new elements into the discussion. Health is a credible interest and it is not perceived as having an economic sub-agenda that could influence the politics of a situation; Change the power balance by bringing into the debate other interests and more boots in the ground to change the way decision makers see the cost of just bending to the usual political influences.
- Bhatia: Driving is a cultural way of life; there is political will behind GHG reductions around solving climate change; there is a hypocrisy with a State that passes AB 32 and a transportation bond that decides to spend exclusively on highway expansion. It should be called out. If this sets back the AB 32 climate change objective 5 years, it will make it that much harder.

- Brazil: Questioned how truck data is used for the CARE Program. Martien: Staff is trying to understand and evaluate some assumptions made during the Health Risk Assessment; large portion of the risk was attributed to trucks, but also large uncertainties in truck travel, percentage of port-related trucks, and volumes of trucks in West Oakland. Survey is complete, but data still being analyzed. Some assumptions were correct and others will need refining. There may be implications in terms of fractions of port trucks that were assumed in the HRA versus what we are seeing on the ground. We will talk to the ARB about it, some assumptions are not big surprises, as there were some uncertainties and adjustments will need to be made.

OTHER BUSINESS

Chairperson Brazil suggested members take information from today's meeting, digest it and the lead member representatives develop recommendations in the form of a report for the Board. He reported that the April symposium meeting is during Spring Break and requested staff conduct a poll.

8. **Time and Place of Next Meeting:** 9:00 a.m., Wednesday, March 11, 2009, 939 Ellis Street, San Francisco, CA 94109.
9. **Adjournment:** The meeting adjourned at 12:42 p.m.

Lisa Harper
Clerk of the Boards