

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET - SAN FRANCISCO, CALIFORNIA 94109

Approved Minutes: Advisory Council Regular Meeting – July 9, 2003

Call To Order

Opening Comments: Chairperson Hanna called the meeting to order at 10:05 a.m.

Roll Call: Present: William Hanna, Chair, Sam Altshuler, P.E., Elinor Blake, Harold M. Brazil, Pamela O'Malley Chang, Irvin Dawid, Rob Harley, Ph.D., Stan Hayes, John Holtzclaw, Ph.D., Kraig Kurucz, Norman A. Lopera, Jr., Kevin Shanahan, Linda Weiner, Brian Zamora.

Absent: Louise Bedsworth, Ph.D., Patrick Congdon, Ignatius Ding, Fred Glueck, Victor Torreano.

Public Comment Period: There were no public comments.

1. Approval of Minutes of May 14, 2003: Ms. Blake moved approval of the minutes; seconded by Dr. Holtzclaw; carried unanimously.

Committee Reports

2. Report of the Air Quality Planning Committee Meeting of May 27, 2003

Mr. Kurucz stated that the Committee received a report on pending legislation from District staff. SB 655 (Sher) will create planning requirements for particulate matter on the same level as for ozone. On July 22, staff will brief the Committee on diesel fuel issues and regulations.

3. Report of the Public Health Committee Meeting of May 19, 2003

Mr. Zamora stated the Committee met in Rodeo and received input from community members on the data generated by the optical monitors along the fence lines of the ConocoPhillips Refinery. The community feels the data it generates is indeed useful. In the near future, the Contra Costa County Health Department will post these monitoring data on the County's website.

4. Report of the Technical Committee Meeting of May 29, 2003.

Dr. Harley stated the Committee received a presentation on refinery flaring systems and combustion efficiency from Barry Friedman, P.E., of The Washington Group International. It endorsed the District's assumption of 98% flare combustion efficiency of hydrocarbons. This assumption will be used in the District's air quality management planning process for ozone attainment. Also, the Committee discussed the role of the flare operator in overseeing flow rates and adjusting steam input. Julia May from Communities for a Better Environment (CBE) noted that high combustion efficiency does not affect the conversion of flare emissions of sulfur into sulfur dioxide (SO₂).

5. Report of the Public Health and Technical Committee Meeting of June 30, 2003.

Mr. Zamora stated the two Committees received presentations from Ted McKelvey of Terra Air Services, Inc., Houston Texas, and Dr. Robert Spellicy, President of IMACC, Red Rock, Texas, on the remote optical measurement of refinery flares and flare emission content. The petrochemical industry will be invited to the next Public Health Committee meeting to offer its perspectives of this technology. The District's regulatory perspective on optical emissions monitoring and measurement will also be sought. Questions that remain for further discussion include the lack of quality assurance protocols for this equipment and how well the system functions in inclement weather and the extent to which it would be unable to capture plume rises.

6. Report of the Executive Committee Meeting of July 9, 2003

Chairperson Hanna stated that the Committee met earlier today and discussed forthcoming Standing Committee work plans and issues of upcoming importance. Staff reported that the Environmental Protection Agency (EPA) will render approval on the 2001 Ozone Plan.

Presentations:

7. Report on the Air & Waste Management Annual Meeting: June 2003.

Mr. Altshuler stated:

- The key issue in the conference concerned the atmosphere and global warming impacts of carbon dioxide (CO₂) emissions. The technology that captures CO₂ out of flue gases and sequesters it through injection into abandoned gas wells entails a major energy penalty. He believes it is preferable to reduce CO₂ through improvements in efficiency and fuel choice. The concept of coal gasification is resurging in discussions of new power plant construction.
- He visited a conference site demonstrating the Rodeo refinery optical remote sensing equipment. It may help address public concerns, but the data produced by it is different from standard monitoring data. Quality assurance/quality control is difficult to develop because known concentrations cannot be inputted and their output measured with a percentage of error.
- A manufacturer of catalysts for diesel engines could not affirmatively answer whether the catalysts will meet state's maximum 20% nitrogen dioxide (NO₂) emission limit in 2004.

Mr. Brazil stated:

- A transportation session sponsored by Desert Research Institute staff concerned the mechanics of measuring particulate matter (PM) and developing emission factors for different vehicle types and sizes. This will be applied to transportation conformity analysis. Another session dealt with transportation conformity planning associated with the eight-hour ozone standard.
- One session reviewed transportation conformity and how pending litigation has adversely affected the efforts to coordinate the Transportation Improvement, Regional Transportation, and State Implementation (SIP) Plans.
- Another presenter addressed Michigan's experience with the NO_x SIP call and transport issues, which dealt with whether EPA is taking control of the local air quality planning process.

- He also attended a presentation that compared door-to-door travel time measurements for transit and private vehicle transit modes in major cities throughout the country. Dr. Matthew Barth of UC Riverside noted that there are optimal congestion levels that prevent cars from going too fast (at which they emit at high levels) or too slow (which also leads to congestion).
- He attended another session sponsored by the Federal Highway Administration, which took credit for vehicle emission reductions through successful transportation conformity planning, while criticizing transportation control measures as being low emission reduction achieving.
- A session on marine shipping indicated that NOx emissions from these operations are not regulated and could lead to ozone attainment problems in the future.
- He attended sessions on the use by regional transportation planning agencies of emission factor models. California uses the Emission Factor Model (EMFAC), while the rest of the country uses the EPA's MOBILE emission factor model, a new version of which has been developed. It has some major structural differences with previous versions of the model. Several papers reported on a number of sensitivity runs of the new MOBILE emission factor model.

Mr. Dawid stated:

- He found that the AWMA participants had extensive technical backgrounds. There were several excellent sessions on water quality and security. An educational tour was held of the 700 megawatt (MW) South Bay Duke power plant, which was built in 1960. Due to a state power contract with New Mexico and Arizona, it only produces 30 MW at present.
- He attended the International Urban Air Quality Forum from June 25-27. Information presented concerned the recent banning of two-stroke, three-wheelers. The reduction of lead emissions from power plants in Ghana would require \$230 million.
- On June 27 he attended a Local Government Commission seminar on Planning and Building More Livable Communities. In its public health track, a paper was presented by Howard Frumpkin, M.D., Ph.D., entitled "Urban Sprawl and Public Health," which opines that public health professionals need to figure more prominently in the field of urban planning, where urban planners and architects have taken the reigns.

Mr. Hayes stated:

- The main issue at the AWMA Conference was climate change. The District's charter to regulate criteria pollutants is connected with greenhouse gases (GHGs) in that 85% of GHGs are carbon dioxide byproducts of fuel combustion. Therefore, increases in vehicle efficiency and public transit ridership, and reduction of vehicle miles traveled (VMT), benefits the earth's climate by reducing GHGs. This issue should be put on the Council's radar screen. Guest speakers could be invited from the California Climate Action Registry, as well as Stanford University's program on the effect of energy technology on climate change.
- He moderated a panel session on homeland and environmental security. An AWMA task force on environmental security will be formed to further investigate some of the issues raised.
- He presented a paper on the air toxics composition of jet exhaust, which included information that had not previously been routinely incorporated into data used by regulatory agencies. Some advances have been made in understanding jet engine exhaust emissions.

Dr. Holtzclaw stated:

- He attended several transportation sessions. Dr. Matthew Barth of U.C. Riverside, who addressed the Council four years ago, gave a paper on how motor vehicle emissions change at varying speeds. The Council would greatly benefit from hearing this presentation.
- He presented a paper on how various development patterns affect driving patterns.
- He also attended the subsequent Local Government Commission smart growth conference.

Mr. Kurucz stated:

- At the opening plenary session noted that energy intensity is down in Mexico, although total GHGs have increased. Energy intensity is higher in the entire United States than in California, which is second in gas and diesel purchasing in the world, behind only the entire United States.
- Sessions discussed the magnitude of PM_{2.5} non-attainment problem and ways of reaching attainment with the national PM_{2.5} standard. An EPA staff member gave a presentation on the chemistry of PM analysis, showing the chemical mechanisms through which some nitrates and sulfates emitted from combustion are converted to PM through secondary formation.
- A representative of the electric industry stated that half of all of the counties in the United States will be out of attainment or lack sufficient data to demonstrate attainment either way. The electric utility industry is lobbying EPA to delay implementation of standard.
- District Deputy APCO Peter Hess gave a local agency perspective on how PM_{2.5} and ozone are linked. He suggested addressing the linkage through (a) speciation of the monitoring data, (b) source identification, (c) development of control measures for stationary and transportation sources, and (d) treatment of PM_{2.5} as a gaseous pollutant formed through secondary atmospheric formation. Linking ozone and PM increases control measure cost-efficiency. The main sources of PM are wood burning (25%), ammonium nitrate (45%) and vehicles (30%).
- Professor Ron Henry of USC reported on his receptor modeling analyses. Through the use of non-parametric linear regression for emission back-casting, he develops refinery and industrial plant emission profiles in a given region. This profiling work first began in Houston and focused on PM, and now it includes volatile organic compounds (VOCs). Dr. Henry also presented a paper on perceived changes in atmospheric visibility and pollutant levels.
- A paper presented by the California Air Resources Board (CARB) staff concerned enhanced vapor recovery at gasoline dispensing facilities. It noted that systems that use “vacuum assist” tend to pull a lot of air into the system, which may in turn force some vapors out of the system. New technology, such as a dripless nozzle, is also under development.
- A pollution prevention session discussed how air pollution could be reduced through improving energy efficiency.
- He attended a session on risk communication in which it was noted that the public is concerned about health but does not necessarily know the language for air quality. Various professional fields were evaluated for credibility with the public. In public forums, manifestations of empathy are helpful, and logistical barriers between the public and the presenters should be removed.

Other Business:

8. Report of the Executive Officer/APCO.

William C. Norton stated:

- Three Spare the Air days were called in June, but there have been no exceedances of the federal one-hour ozone standard despite some periods of high temperature. However, there were two exceedances in June of the national eight-hour ozone standard
- Based on data from the District from the last three years, excluding this year, CARB will recommend to EPA that the District be declared in compliance with the eight-hour ozone standard. EPA has until April 2004 to render a decision on this designation. If the District is declared in attainment, then a Maintenance, rather than an Attainment, Plan will be required.
- The EPA has last indicated it will approve the District's 2001 Ozone Attainment Plan that was submitted in November 2001. Whether it will be approved with conditions is still unknown. One of the commitments in that Plan was to prepare a 2004 Ozone Plan Update. Prior to the District's adoption of the 2001 Plan, it held six community meetings. For the 2004 Plan, six meetings will be held prior to the public hearing, in such communities as Rodeo, Crocket, Concord, Livermore, Napa and Sonoma. The Council members are invited to attend.

Ms. Weiner offered to assist Mr. Norton in providing e-mail listings through the Bay Area Clean Air Task Force, to send out information about the community meetings. Ms. Blake suggested staff also ask the county health departments to announce these meetings. Mr. Norton indicated staff would request health department staff attendance as well.

- A recruiter has been hired to interview and screen applicants for the District's Executive Officer/Air Pollution Control Officer (EO/APCO) position. Applications were due by June 20, and recruiter interviews have been held. Initial recommendations will be given to the Board on July 16. Two sets of interviews will be held on July 29, and if necessary on August 7, by a committee of the Board as well as an advisory panel comprised of stakeholder groups, which will provide its recommendations to the Board. The Advisory Council Chair, or a designee, has been asked to serve on this panel. There will be no Board meetings in August. Discussions on the appointment will begin in September. The goal is to provide the new EO/APCO with sufficient time for vacation and giving notice to the previous employer, with official employment to begin on November 1. A one-month period of transition to work with the present EO/APCO will commence. The latter's employment will end on November 30, 2003.
- A new Board member, Patrick Kwok of the City of Cupertino, has been appointed. A briefing and orientation session will be conducted for him on July 16, 2003. Members of the Advisory Council are welcome to attend. A tour of the District facility will follow the orientation.

9. Report of the Chairperson.

Chairperson Hanna:

- Welcomed new Council member Pamela Chang, representing the "Architect" category.

- Stated he has asked Dr. Holtzclaw to represent the Council on the EO/APCO selection group.
- Stated that the Sonoma County Climate Protection Campaign did receive approval from the Board for the \$25,000 it requested in District funding. The Advisory Council had noted for the Board of Directors that the Campaign was not coordinated with the State Registry, and had, therefore, recommended the Campaign receive District staff support instead of funding. At the July 2, 2003 Board meeting, the Campaign representatives stated that coordination with the Registry was problematic in that the Registry had some major data extraction problems. The Campaign has been lending its expertise to the Registry in fixing this problem.

10. Council Member Comments/Other Business

Mr. Altshuler stated that there was a hearing in Sacramento in June between the CEC and ARB to investigate getting the state more energy independent from foreign oil. Energy efficiency, CO2 and air pollution are interconnected. The Air District should track these hearing activities.

Mr. Lapera reported on an issue that was discussed last year by the Technical Committee regarding the impact of the East Bay eucalyptus grove on air quality. The staffs of the Air District and East Bay Regional Park District have met, and a test project for thinning the grove is now underway. This will lead to air quality improvements, re-growth of the native habitat, and fire hazard reduction. Conservation camp crews are removing one acre of eucalyptus trees per day. Air District, Fire Department and Park District staffs are coordinating prescribed burn times. The Park District is also exploring the broadcasting of woodchips in place as well as sending the chips to a local waste management transfer station for subsequent conversion into mulch. However, the transportation of woodchips to the facility would greatly increase the price of this approach.

Ms. Weiner stated she was in Thailand on a social marketing campaign on air quality project on green fleets sponsored by the San Francisco Clean Cities Coalition. There the demand for electric vehicles is greater than the supply, which provides an interesting contrast with the United States. In the city of Chang Mai, 25 electric vehicles are used for transportation at a campus with 30,000 students. Traffic in the City of Bangkok is constantly gridlocked, but behavior patterns provide a contrast with the transportation experience here in the United States, because no one honks their horn or screams at cars or pedestrians to “get out of the way.”

11. Time and Place of Next Meeting: 10:00 a.m., Wednesday, September 10, 2003, 939 Ellis Street, San Francisco, California

12. Adjournment: The meeting was adjourned at 11:45 a.m.

James N. Corazza
Deputy Clerk of the Boards