BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET - SAN FRANCISCO, CALIFORNIA 94109

Approved Minutes: Advisory Council Regular Meeting - November 12, 2003

Call to Order:

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

Roll Call: Present: William Hanna, Chairperson, Sam Altshuler, P.E., Elinor Blake, Pamela Chang, Patrick Congdon, Ignatius Ding, Fred Glueck, Rob Harley, Ph.D., John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan, Victor Torreano, Linda Weiner, Brian Zamora.

Absent: Louise Bedsworth, Ph.D., Harold Brazil, Irvin Dawid, Stan Hayes, Norman A. Lapera, Jr.

Public Comment Period: There were no public comments.

Consent Calendar:

1. **Approval of Minutes of September 10, 2003.** Dr. Holtzclaw requested that "2002" be changed to "2001" in paragraph two, line two of Item No. 9 on page five, and moved approval of the minutes as corrected; seconded by Ms. Blake; carried unanimously.

Committee Reports

2. **Report of the Air Quality Planning Committee Meeting of September 30, 2003.** Mr. Kurucz stated the Committee received a presentation from Networkcar on a pilot project in the Bay Area that tests remote sensing devices in taxicabs and paratransit vehicles. The findings suggest that this technology detected emission control problems that would not have gone undetected by the Smog Check II program vehicle emission test. Mr. Glueck added that staff from the Metropolitan Transportation Commission (MTC) gave a presentation on MTC's Long-Range Transportation Plan. The main objectives of this Plan are to fix traffic congestion and road condition problems.

3. **Report of the Public Health Committee Meeting of October 20, 2003.** Mr. Zamora stated that the Committee received presentations from the staff of the Western States Petroleum Association and the ConocoPhillips refinery on optical monitoring technology at refinery fence lines. The refinery is committed to providing fence line monitoring data and finds that it improves community relations. It also feels the optical technology is costly and has a number of technical problems. The Committee has heard from members of the communities near the refinery, the equipment manufacturers and vendors, monitoring system maintenance contractors, refinery environmental and engineering staff, as well as the District. At its next meeting, it will develop recommendations on the referral concerning whether optical monitoring technology should be recommended for installation at other refineries and chemical plants in the Bay Area. Mr. Torreano added that the Committee may collaborate with the Technical Committee in review of some aspects of this issue.

4. **Report of the Technical Committee Meeting of October 20, 2003.** Dr. Harley stated that the Committee developed the recommendations on refinery flares which the full Council will review later today. He noted that refinery flaring is of concern for its impact not only on local air quality but also on regional air quality in terms of ozone and particulate matter (PM) formation. Major subjects of review include the extent to which flaring ensures refinery process safety in shut-downs, start-ups and emergencies, and whether a flare control rule should be developed based on the data that will be gathered from the flare monitoring rule.

   District staff and refinery estimates of hydrocarbon (HC) emissions from refinery flares differ from 22 to 0.2 tons per day, respectively. Those estimates are for different years and employ different assumptions and data. The Committee believes that HC emission estimates from flares require further refinement and, in particular, should be based on actual measurements rather than assumptions. It is critical to have accurate data on the quantity and content of gas flow to the flare and how effectively the HCs are destroyed in combustion. Remote sensing techniques may help in evaluating the HC destruction efficiency at the flare tip.

   Gas recovery systems at one refinery have also significantly reduced flaring emissions in the last two years, and improvements to flare gas recovery systems have also been made at other refineries. The greater attention now given to flaring has lead to improvements in refinery flare management and reductions in flare emission totals. Although the Committee's recommendations focus on HCs, flares emit other pollutants including soot, carbon dioxide (CO_2), nitrogen and sulfur compounds. Even with the complete destruction of HCs, emissions of sulfur compounds will not be affected.

   The Committee recommends that:

   (a) staff work collaboratively with refineries using new data from the flare monitoring rule, to obtain a better handle on HC emissions, and keep interested parties informed.

   (b) staff and the refineries investigate remote sensing technologies for flare emission analysis, and track the flare analyses underway in Texas and the South Coast AQMD.

   (c) adoption of any flare control rule should incorporate and be based on data gathered from the flare-monitoring rule.

   Ms. Weiner suggested that obtaining data on hospital admissions during flaring would be helpful in addressing public health impacts. Mr. Glueck inquired as to what percentage of total HC emissions in the inventory can be attributed to flaring, given the diversity of estimates from the refineries and the District. Dr. Harley replied that actual measurements and engineering estimates based upon historical data often do not match. William C. Norton, Executive Officer/APCO, added that in the 2001 Ozone Attainment Plan, the District estimated refinery flare emissions at 13 tons per day (tpd) of HCs out of a total of 500 tpd of HCs. The estimate of 22 tpd of HCs that was in the initial Technical Assessment Document was preliminary. A final Technical Assessment Document will be issued next month with a revised estimate that will likely be less than 22 tpd.

   Mr. Shanahan raised the question of how broader emission inventory estimates relate to concerns over local impacts of flaring in neighborhoods. Dr. Harley replied that the former is concerned with regional air quality planning, with emission impacts evaluated along wind trajectories and control strategies targeted accordingly. Within a broader regional air quality analysis, it is difficult to identify and quantify the amount of local emission reductions from specific control strategies.

Chairperson Hanna called for public comments, and the following individual came forward:

Dennis Bolt
Senior Coordinator, Bay Area
Western States Petroleum Association

stated the recommendations are sound. Flares are efficient and effective combustion devices that virtually destroy all gases going to the flame, particularly during maintenance events. They are also essential safety devices in emergencies and combust toxic compounds that would be vented. In considering adoption of any flare control rule it is critical that flare operator judgment not be influenced to vent fewer quantities of gas to the flare to prevent receipt of a Notice of Violation as this could lead to a catastrophic event. The refineries also request that the Advisory Council's recommendations on flaring be posted on the District's website and published in the District's forthcoming Technical Assessment Document. The refineries appreciate that the District will further refine its estimates of HC emissions from flares to obtain the most accurate estimates.

Mr. Bolt added that there are no viable alternatives to flaring, and any new refinery would be constructed with flaring systems. Flaring is nonetheless being reduced, with a 70% reduction in flare gas flow achieved by one refinery through gas recovery. The refineries are also making numerous process and performance improvements. The District is facilitating coordination among the refineries regarding the causal analysis of flaring events, and further such analyses based on actual flow data obtained through the flare-monitoring rule will be provided to the District.

Ms. Blake inquired about how refinery proactivity might supplant the prevailing pattern of refinery response to public outcry over major releases so that there is a greater nexus between corporate responsibility and community health and safety. Mr. Bolt replied that the balance derives from an effective evaluation of scientific judgment within the full range of ideas and perspectives. The flare-monitoring rule will provide data critical to evaluations appropriate to that field of inquiry.

Mr. Norton added that staff is facilitating coordination among the refineries in a variety of areas, including flare gas data generation and process improvements. These proactive efforts surpass previous industry and regulatory efforts regarding refinery emissions. Ms. Weiner replied that while coordination has recently improved, the flare monitoring rule and other refinery process improvements were reactions to refinery events that had adverse community health impacts.

Chairperson Hanna and Dr. Harley clarified that HC combustion efficiency in a flare does not assume stoichiometric conversion to carbon monoxide (CO), CO_2, and water (H_2O). Some HCs may be emitted as soot, aldehydes, and other compounds, due to incomplete combustion. A more complete emissions picture is needed.

Ms. Weiner moved adoption of the recommendations with the inclusion of her suggestion that staff gather data on hospital admissions data around flaring events. Ms. Blake seconded the motion, suggesting that staff could consult with the state and county health officers for data on hospital and emergency admissions and physician visits during flaring activities. In discussion, Mr. Altshuler stated that the resource impacts that District staff would face as a result of collecting such data should also be assessed. Mr. Kurucz suggested that the Public Health Committee should first meet to assess any logistical problems associated with examining potentially confidential medical records. Mr. Glueck opined the proposed addition is entirely separate from the referral that was originally given to the Technical Committee on evaluation of refinery flare combustion efficiency.

Dr. Harley stated that the suggestion is supportable but was not a part of the Committee's deliberations. The collection of such medical data might be better linked prospectively to the collection of data from the flare-monitoring rule. This would allow the Public Health Committee to review the parallel data sets then offer the Council a recommendation based on its deliberations. Mr. Norton suggested that staff work with the local health officers and hospitals to assess the resource issue and report back to the Public Health Committee. Mr. Zamora observed that the recommendation does not ask staff to conduct the study on hospital admissions data but merely to confer with health experts who would conduct the health study, thus integrating science, planning and public health.

Chairperson Hanna called for a separate vote on each recommendation in the Committee report:

Recommendation No. 1, with the following added, per previous discussion, at the end: "District staff should collaborate with the staff of the Contra Costa County and/or Solano County health departments regarding data concerning relevant public health impacts during major flaring events."

Ayes: Altshuler, Blake, Chang, Ding, Hanna, Harley, Holtzclaw, Kurucz, Shanahan, Torreano, Weiner, Zamora.

Noes: Congdon, Glueck.

Recommendation Nos. 2 and 3 were each carried unanimously in separate votes by acclamation.

5. **Report of the Executive Committee Meeting of November 12, 2003.** Mr. Hanna stated the Executive Committee:

   - was introduced to the new Executive Officer/Air Pollution Control Officer, Jack Broadbent, whose first official day of work at the District began on Monday, November 10, 2003.
   - discussed the agenda for the January 14, 2003 Advisory Council Retreat.
   - endorsed and now proposes the following slate of Officers for 2004: Elinor Blake, Chair, Brian Zamora, Vice-Chair; Kraig Kurucz, Secretary. Ms. Weiner moved the Council approve the slate of Officers for 2004; seconded by Dr. Holtzclaw; carried unanimously.

6. **Applicant Selection Working Group Meeting of October 17, 2003.** Chairperson Hanna stated that the Working Group met in November to screen applications and interview candidates for four Council vacancies. On October 29, 2003, the Group presented its recommendations to the Board Executive Committee, which approved them. The full Board will vote on these next Wednesday. He added that Pamela Chang has recently tendered her resignation from the Architect category effective the date her replacement is appointed. He directed staff to advertise for this position.

Presentations:

7. **Status Report on 2004 Ozone Planning Process.** Jean Roggenkamp, Planning & Transportation Manager, stated that on October 31, 2003 the Environmental Protection Agency (EPA) made a proposed finding that the Bay Area has attained the national one-hour ozone standard. This is based on data from 2001-2003 in which no monitoring station has recorded more than three exceedances. If the EPA finalizes this finding, several requirements regarding an attainment demonstration, reasonable further progress and contingency measures will be waived for the District. However, the waiver will be withdrawn if the District records a violation of the one-hour standard. The public comment period on this proposed attainment finding will end on December 1, 2003.

The District will continue to address attainment of the state ozone standard and the national eight-hour ozone standard, as well as mitigation of downwind transport impacts. The District, the California Air Resources Board (CARB), Environ Corporation, U.C. Riverside and Desert Research Institute are conducting photochemical modeling for central California. The models are underestimating ozone for historical events in 1999 and 2000. Two working groups have been convened by staff to review on-road motor vehicle emissions, and wind/temperature fields, respectively, to better evaluate and improve model performance. These groups will report to the Modeling Advisory Committee and Ozone Working Group in early December 2003.

In September, community scoping meetings on the ozone plan were held in Rodeo, Richmond, East Palo Alto, Oakland, San Francisco and San Jose. Local public health department staff participated in several of these meetings. Participating citizens offered suggestions on stationary and mobile source control measures, as well as transportation control measures and public transit improvements. These have been added to the package of measures that will be reviewed by staff for potential inclusion in the plan. Other topics raised by the participants focused on local health effects, cumulative air quality impacts, lack of health care data and health care services, and free-ways as mobile source emission hot spots. Staff's response to these comments will be posted on the District's website. Some groups requested that the District hold training sessions prior to the community meetings. More meetings will follow when the draft plan is available for comment. Ms. Blake and Mr. Zamora commended staff for the excellent work shown in sponsoring these community meetings and urged the District continue to hold such meetings as a matter of course.

In reply to questions, Ms. Roggenkamp noted that over 350 proposed mobile source and stationary control strategies will be reviewed. Some of these have been implemented already. The District is already considering about a dozen of these control measures and a few of them may move forward. Other measures are either potentially feasible but require further study, entail only minor emission reductions, are not technically feasible or are not cost-effective. Many of these measures are under the jurisdiction of the EPA, CARB or Bureau of Automotive Repair. Others would require legislative approval and an accompanying funding mechanism. Staff will complete its review of these measures in December 2003 and prepare a package for review by the Ozone Working Group in January 2004. The District has hired a consultant, Environmental Audit, to conduct an environmental review of the Ozone Plan and can provide a presentation to the Advisory Council next year.

Ms. Roggenkamp also distinguished "redesignation to attainment" from a "finding of attainment," noting that the former would require the demonstration that attainment derived from emission reductions from control measures and that attainment can be maintained for a period of 20 years.

Other Business:

8. **Report of the Executive Officer/APCO.** Mr. Norton stated that the District will further improve its community outreach efforts through a Bay Area high school and college student intern program. He added that his employment will conclude on November 21, 2003, and that it has been a pleasure to work with the Advisory Council.

   Jack Broadbent, newly appointed Executive Officer/APCO, stated that he began working at the District on November 10, 2003. Noting that he has worked for 20 years in air quality management, at both the South Coast AQMD and EPA Region IX. He added that he is looking forward to working with the Advisory Council.

9. **Report of the Advisory Council Chair.** Chairperson Hanna expressed his appreciation to:

   - the Standing Committee and Working Group Chairs, and Councilmembers, for their hard work.
   - District staff for its input in presentations and receptivity to Council recommendations.
   - Deputy Clerk James Corazza for his secretarial services to the Council and to its Chair, which have been of noteworthy assistance to the Chair in managing the Advisory Council.
   - the three outgoing members of the Council whose terms end on December 31, 2003—Patrick Congdon, Ignatius Ding and Jane Kelly for the time they devoted to Council activities.
   - outgoing member Robert Harley, Ph.D., whose term expires on December 31, 2004 but who is leaving at the end of this year. He was appointed to the Council in April of 1997 and served on the Technical Committee, of which he was the Chair this year. He has brought to the Council his expertise in mobile source emission and photochemical modeling, and provided presentations on the Caldecott Tunnel studies, as well as of diesel fuel use as a means of measuring emissions in various parts of the state. His scholarship, technical knowledge and quality participation have been invaluable to the deliberations of the Advisory Council.

   Dr. Harley replied that it has been a real pleasure to serve on the Advisory Council and to work with its members and the staff. Noting that he must devote more time to research and committee work at U.C. Berkeley, Dr. Harley stated he would like to return to the Council later in his career.

   Mr. Congdon expressed his appreciation for the opportunity to serve on the Council, and noted that his appointment as General Manager of the Santa Clara County Open Space Authority has rendered his schedule too full to permit his consistent participation in Advisory Council meetings.

   Mr. Ding expressed his appreciation for the opportunity to serve on the Council, and noted his change in jobs requires considerable travel and poses schedule conflicts with Council meetings.

10. **Council Member Comments/Other Business.** There were none.

11. **Time and Place of Next Meeting.** 10:00 a.m. – 2:00 p.m., Wednesday January 14, 2003. Ms. Blake noted she would seek the assistance of Dr. Harley in trying to secure a meeting place at the U.C. Berkeley campus for the Advisory Council Retreat and Regular Meeting.

12. **Adjournment.** 11:57 a.m.

James N. Corazza
Deputy Clerk of the Boards

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