



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

**BOARD OF DIRECTORS
EXECUTIVE COMMITTEE MEETING**

COMMITTEE MEMBERS

**SCOTT HAGGERTY – CHAIRPERSON
GAYLE UILKEMA – SECRETARY
JERRY HILL
MARK ROSS
PAMELA TORLIATT**

**MARLAND TOWNSEND – VICE
CHAIRPERSON
MARK DeSAULNIER
JULIA MILLER
TIM SMITH**

**MONDAY
MARCH 29, 2004
9:30 A.M.**

**FOURTH FLOOR CONFERENCE ROOM
DISTRICT OFFICES**

AGENDA

- 1. CALL TO ORDER – ROLL CALL**
- 2. PUBLIC COMMENT PERIOD** *(Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 939 Ellis Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.*
- 3. APPROVAL OF MINUTES OF DECEMBER 19, 2003**
- 4. QUARTERLY REPORT OF THE HEARING BOARD** **T. Dailey/4965**
- 5. REPORT OF THE ADVISORY COUNCIL** **E. Blake/4965**
Eblake@igc.org
 - a) Report of Council Meetings*
 - b) Recommendation for Architect Category*
- 6. REGIONAL AGENCY COORDINATION** **J. Broadbent/5052**
jbroadbent@baaqmd.gov

The Committee will discuss the Air District's role in the proposed creation of a joint policy committee proposed by the Metropolitan Transportation Committee and the Association of Bay Area Governments.
- 7. CLOSED SESSION – CONFERENCE WITH EXECUTIVE OFFICER/APCO REGARDING MANAGEMENT TOTAL COMPENSATION SURVEY** **J. Broadbent/5052**
jbroadbent@baaqmd.gov

Pursuant to Government Code Section 54957.6(a), the Committee will consider salary changes for management employees for fiscal year 2004-2005.

8. COMMITTEE MEMBER COMMENTS/OTHER BUSINESS

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

9. TIME AND PLACE OF NEXT MEETING: 9:30 a.m., Wednesday, JUNE 30, 2004, 939 ELLIS STREET, SAN FRANCISCO, CA

10. ADJOURNMENT

**CONTACT CLERK OF THE BOARDS - 939 ELLIS STREET
SAN FRANCISCO, CA 94109**

**(415) 749-4965
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov**

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

Bay Area Air Quality Management District
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

DRAFT MINUTES

Summary of Board of Directors
Executive Committee Meeting
9:30 A.M., Wednesday, December 19, 2003

1. **Call to Order - Roll Call:** Chairperson Scott Haggerty called the meeting to order at 9:30 a.m.
Present: Scott Haggerty, Chair, Mark DeSaulnier, Jerry Hill, Mark Ross, Pamela Torliatt, Marland Townsend, Gayle Uilkema.
Absent: Julia Miller, Tim Smith.
2. **Public Comment Period:** There were no public comments.
3. **Approval of Minutes of October 29, 2003:** Director DeSaulnier moved approval of the minutes; seconded by Director Hill; carried unanimously without objection.
4. **Report of the Advisory Council:**
 - a) *Report of Council Meetings*
 - b) *Advisory Council Recommendations on Refinery Flaring*

Advisory Council Chair William Hanna presented item 4a, Report of the Advisory Council: October 1 – November 30, 2003, which summarized the activities of the Council and its Standing Committees. Mr. Hanna announced the Council officers for 2004 as follows: Elinor Blake, Chairperson; Brian Zamora, Vice-Chairperson; and Kraig Kurucz, Secretary.

Mr. Hanna presented item 4b and reviewed the Advisory Council's recommendations on refinery flaring stating that the primary recommendations are:

1. District staff works collaboratively with refineries to develop improved estimates of Hydrocarbon (HC) emissions from flares at refineries. In addition, District staff should collaborate with the staff of the Contra Costa and/or Solano County health departments regarding data epidemiology and hospital admission that they can correlate with major flaring events.
2. District staff and refiners should investigate further the use of optical remote sensing or other appropriate plume monitoring techniques to measure the destruction efficiency in flare systems.
3. The adoption of any control rule directed at refinery flares should incorporate and be based upon data gathered under the recently adopted flare-monitoring rule.

There was discussion on the release of the Technical Assessment Document (TAD) and the need to have the District and refineries agree on the inventory numbers before the document is released. The document was to be released on Monday, December 22, 2003. The Advisory Council recommendation is to make sure the District has the information from the monitoring rule before there is a control rule and District staff agrees with this recommendation. The District should move expeditiously and the refinery representatives should provide the District staff the data as soon as possible so the District can meet its obligation under the Ozone Attainment Plan. The TAD would then be released in January 2004.

Committee Action: Director Townsend moved that the Committee receive the report and encourage the expeditious completion of the work in collaboration with the refineries so that the report can be moved forward; seconded by Director Hill; carried unanimously by acclamation.

5. Report on Air Pollution Complaint Program Revisions: *Staff presented a report outlining the efforts undertaken to address community and environmental groups' concerns regarding the District's Complaint Program.*

Janet Glasgow, Air Quality Program Manager, presented the report and stated that about one year ago the community expressed concerns about how the District was responding to complaints. The District began the process of reviewing and revising the program. Ms. Glasgow discussed the following points:

- Complaint investigation and resolution is one of the District's most important responsibilities.
- Community meetings were held to receive input from the Environmental Justice communities.
- The five highest priority needs for change from the Community members.
 - Provide ability to track complaints.
 - Create a community-based and verifiable process to make and confirm complaints.
 - Empower the community and the District to be proactive on odors.
 - Set clear thresholds for additional enforcement.
 - Require training for District staff on how to work with the community.
- State and national surveys were conducted for Best Practices.
- Staff discussed ways for the public to register complaints or provide additional information, in addition to other improvements such as translation for non-English-speaking communities, listings in Bay Area telephone books, and training of office and field staff.
- Future changes include improved computer infrastructure for complaint processing and increased information flow to the community through web access.
- There was also discussion on a brochure that is provided to the public and the possibility of a PG&E mail stuffer to educate people.

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

6. Enterprise Resource Planning (ERP) Implementation Status Report: *A description of the JD Edwards ERP implementation was presented, including updates on system function, budget and timeline.*

Jeff McKay, Director of Information Services, presented the report and updated the Committee on the ERP implementation status and reviewed the following:

1. The ERP implementation components (technology implementation and vendor management).
 - Educate the team.
 - Define the business process.
 - Set up the business process.
 - Migrate legacy data.
2. The pre-contract projected dollars from Deloitte & Touche.
3. The actual dollars.

Mr. McKay noted that when the District goes live with J.D. Edwards, several functions, including accounts receivable, would be taken out of the IRIS system and brought into J.D. Edwards. Mr. McKay reported that the project is on time and within budget.

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

7. Status Reports on Ozone Attainment Planning:

- (a) Public Comments on EPA's Proposed Finding of Attainment*
- (b) Bay Area 2001 Ozone Attainment Plan*
- (c) Re-designation Request Maintenance Plan Requirements*
- (d) Control Measure Evaluations*

Jean Roggenkamp, Planning and Transportation Manager, presented the report and stated that on October 31, 2003, the Environmental Protection Agency (EPA) proposed a finding of attainment of the national 1-hour ozone standard for the Bay Area. Of the seven comment letters that EPA received, three were in support of and four were opposed to the finding of attainment. EPA will consider the comments and determine what kind of final action to take.

Ms. Roggenkamp stated that in the proposed finding of attainment, EPA indicated that they also wanted to take final action on the District's 2001 Ozone Attainment Plan. If EPA finalizes the finding of attainment, then parts of the 2001 Ozone Attainment Plan are no longer required: attainment demonstration, reasonable further progress, and contingency measures. Other parts, such as the emission inventory and control strategies will still be required. Ms. Roggenkamp reported that the District, the Metropolitan Transportation Commission (MTC), and the Association of Bay Area Governments (ABAG) are drafting a letter to the Air Resources Board (ARB) urging them to withdraw the parts of the Plan that are no longer necessary and urge EPA to expeditiously approve those parts that are still required.

Ms. Roggenkamp reviewed the required elements of a redesignation request and maintenance plan for the national one-hour ozone standard. The redesignation request must include the following:

- Monitoring data demonstrating attainment.
- A demonstration of air quality improvement due to permanent, enforceable emission reductions.
- A maintenance plan demonstrating the ability to maintain the standard for 10 years.
 - New transportation conformity budget.
 - Contingency measures.

- EPA would need to show they have approved the State Implementation Plan (SIP) and implementation of all SIP comments.

Ms. Roggenkamp provided a status report of the control measure evaluation process for the 2003/04 ozone planning process. There are 370 measures that the District is analyzing and there has been a preliminary review of all of them. Ms. Roggenkamp reviewed the categories. The preliminary evaluations will be discussed with the Ozone Working Group at their January 6, 2004 meeting.

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

- 8 Committee Member Comments:** Director Townsend gave a brief report on the League of California Cities and stated that the attitude in Sacramento is changing and that the representatives will be more responsive to their constituents.
- 9. Time and Place of Next Meeting:** At the Call of the Chair.
- 10. Adjournment.** The meeting was adjourned at 10:59 a.m.

Mary Romaidis
Clerk of the Boards

mr

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
 Memorandum

TO: Chairperson Scott Haggerty and Members of the Executive Committee
FROM: Chairperson Thomas M. Dailey, M.D. and Members of the Hearing Board
DATE: March 19, 2004
RE: Hearing Board Quarterly Report – OCTOBER 2003 – DECEMBER 2003

RECOMMENDED ACTION:

This report is provided for information only.

DISCUSSION:

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
Alameda/Fremont	NEW UNITED MOTOR MANUFACTURING, INC. (Appeal – Docket No. 3441) – Appeal from the Denial of Application No. 7151 – Full Hearing	Appeal	Denied	===	===
Alameda/Newark	PECHINEY PLASTIC PACKAGING, INC. (Appeal - Docket No. 3430) – Appeal from specific Terms and Conditions imposed in the Revised MFR Permit for Facility # A0273 – Pro Forma Hearing	Appeal Title V	Matter held in abeyance. Both parties finalizing settlement agreement	===	===
Contra Costa/Pittsburg	DELTA ENERGY CENTER (Interim Variance – Docket No. 3438) – Interim Variance from regulations requiring compliance with permit conditions (APCO not opposed.)	2-1-307 2-6-307	Granted	9/30/03 to 12/29/03	None (SO ₂)
Contra Costa/Pittsburg	DELTA ENERGY CENTER (Regular Variance – Docket No. 3438) – Regular Variance from regulations requiring compliance with permit conditions (APCO not opposed.)	2-1-307 2-6-307	Withdrawn due to agreements reached with District	===	===
Marin/San Rafael	KEATON'S MORTUARY (Appeal – Docket No. 3429) – Appeal of Clean Air on Fifih Avenue, Theresa Dutton, Max Kniesche, Marin Academy, Dr. Robert J. Rosenberg, D.D.S., D.S.c.D., John and Armida Scopazzi, Brad Sears and Chris Yamate from the Authority to Construct Application No. 006416 issued to Keaton's Mortuary – Pro Forma Hearing.	Appeal	Withdrawn	===	===

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
San Francisco	MIRANT POTRERO LLC (Appeal – Docket No. 3434) – Appeal of Communities for a Better Environment, Bayview Hunters Point Community Advocates, Literacy for Environmental Justice, and Our Children’s Earth from the Grant of Interchangeable Emission Reduction Credit Certificates Based on Application Number 6473 to Mirant Potrero LLC – Pro Forma Hearing	IERC Appeal	Pro Forma hearing continued to 1/29/04	===	(NOx)
Santa Clara/Santa Clara	OWENS CORNING (Appeal – Docket No. 3276) – Appeal from the Denial of Application No. 18028 to Bank Emission Reduction Credits. The Santa Clara County Superior Court has directed the Hearing Board to set aside and vacate its Order Denying Appeal and to consider the two remaining issues in this matter – File re-opened; Pro Forma Hearing	Banking Emissions Appeal	Evidentiary hearing on 3/4/04; two remaining issues to be resolved by 6/1/04	===	===
Santa Clara/Santa Clara	PERKINELMER, INC. (Variance – Docket No. 3442) – Variance from regulation requiring compliance with permit conditions and limiting emissions of volatile organic compounds from semiconductor wafer fabrication operations	2-1-307 8-30-304.5.2	Withdrawn	===	(VOC)
Santa Clara/San Jose	UNITED TECHNOLOGIES CORPORATION, PRATT & WHITNEY SPACE PROPULSION (Variance – Docket No. 3435) – Variance from regulation requiring compliance with permit conditions.	2-1-307	Withdrawn	===	===
Santa Clara/San Jose	LARK AVENUE CAR WASH (Variance – Docket No. 3436) – Variance from regulation requiring compliance with permit conditions and regulation limiting emissions of organic compounds from gasoline dispensing facilities (APCO not opposed.)	2-1-307 8-7-301.13 & 301.2	Granted	9/15/03 to 4/30/04	343.5 # (VOC)
Santa Clara/San Jose	MMC TECHNOLOGY, INC. (Variance – Docket No. 3439) – Variance from regulation requiring compliance with permit conditions.	2-1-307	Withdrawn	===	(VOC)
Sonoma/Sebastopol	ROBERT M. MILLER/DBA MILLER OIL CO. (Variance – Docket No. 3440) – Variance from regulation limiting emissions of organic compounds from gasoline dispensing facilities (APCO opposed.)	8-7-302.3	Withdrawn (SB)	===	(VOC)
Various	INTERNATIONAL PAINT (INTERLUX DIVISION) (Product Variance – Docket No. 3431) – Product Variance from regulation limiting emissions of volatile organic compounds from the surface preparation and coating of marine vessels, components and structures intended for exposure to a marine environment, including oil drilling platforms and navigational aids (APCO not opposed to one year variance with certain conditions.)	8-43-321	Granted	6/9/03 to 6/8/04	5 #/Day (VOC)

SB = Small Business

**NOTE: During the fourth quarter of 2003, the Hearing Board dealt with 5 Dockets on 4 hearing days.
A total of \$ 367.55 was collected as excess emission fees during this quarter.**

Respectfully submitted,

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

Prepared by: Neel Advani, Deputy Clerk of the Boards

FORWARDED: _____

NA:na (3/19/04) (HBEXQURT)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Haggerty and Members of the Executive Committee
From: Elinor Blake, Chairperson, Advisory Council
Date: March 10, 2004
Re: Report of Advisory Council: January 1 – March 10, 2004

RECOMMENDED ACTION:

This report is provided for information only.

DISCUSSION:

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

1. Regular Meeting & Retreat – January 14, 2004. The Council prepared its work plan for 2004; an outline of the plan was included in the February 18, 2004 Board of Directors Regular Meeting Agenda packet. The Council received a presentation from staff on cumulative risk assessment and the precautionary principle and prepared its work plan for 2004. An outline of the work plan was enclosed in the Agenda Packet of the Board of Directors Regular Meeting of March 4, 2004. *(Minutes included in the March 29, 2004 Board of Directors Executive Committee Meeting Agenda packet.)*
2. Air Quality Planning Committee Meeting – February 3, 2004 and Technical Committee Meeting – February 24, 2004. The Committees received and discussed a presentation from staff on the control measures developed by the South Coast and San Joaquin Valley air districts for possible inclusion in the 2004 update to the District's Ozone Attainment Plan. *(Minutes included in the March 29, 2004 Board of Directors Executive Committee Meeting Agenda packet.)*
3. Public Health Committee Meetings of February 23 and March 10, 2004. In preparation for providing comments to the Air Pollution Control Officer on the District's draft toxics New Source Review rule and the draft Cal/EPA Environmental Justice implementation protocols, the Committee on February 23 received and discussed presentations on cumulative risk assessment and the precautionary principle. The speakers were Cindy Tuck, General Counsel, California Council on Environmental and Economic Balance; Amy Cohen, Staff Attorney, and Ken Klock, Staff Scientist, Environmental Law & Justice Clinic, Golden Gate University School of Law. *(February 23, 2004 minutes included in the March 29, 2004 Board of Directors Executive Committee Meeting Agenda packet.)*

The Committee discussed these presentations at its March 10, 2004 meeting and will begin developing comments at the April meeting. The Committee also received and discussed a presentation from Council member Diane Bailey on a recent meeting of the California Air Resources Board Environmental Justice Stakeholders Group. *(March 10, 2004 minutes to be included in a future Board of Directors Executive Committee Meeting Agenda packet.)*

4. Executive Committee Meeting – March 10, 2004. The Committee reviewed progress on the Council’s work plan and updated it accordingly. The Committee received and discussed a proposal from the Clerk’s Office for tracking actions resulting from Advisory Council recommendations; and the Chair will work with the Clerk’s Office in modifying the proposal in accordance with the suggestions made at the meeting. The Committee requested that the Clerk’s Office schedule a tour of the District facility for the new members of the Council. *(Minutes to be provided in a future Board of Directors Regular Meeting Agenda packet.)*

5. Regular Meeting – March 10, 2004. Councilmember Robert Bornstein, Ph.D., gave the Council a presentation on the “New York City Urban Atmospheric Observatory (UAO) and its role in emergency planning: Lessons for the San Francisco Bay Area?” The UAO is a large, multi-agency project for which he is the Chief Scientist. The Council received and discussed the reports of its Standing Committees and of the Air Pollution Control Officer. The Council thanked architect Pamela Chang for her service, as she leaves the Council next month. *(Minutes to be provided in a future Board of Directors Regular Meeting Agenda packet.)*

Respectfully submitted,

Elinor Blake
Advisory Council Chairperson

Prepared by: James N. Corazza

FORWARDED BY: _____

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

APPROVED MINUTES

Advisory Council Regular Meeting & Retreat
and
Meeting of the Public Health Committee
Meeting of the Air Quality Planning Committee
Meeting of the Technical Committee
10:00 a.m., Wednesday, January 14, 2004
Bayside Conference Room – Port of San Francisco
Pier 1, San Francisco, California 94111

CALL TO ORDER: 10:06 a.m.

Opening Comments: Chairperson Blake thanked newly appointed Council member Jeffrey Bramlett for arranging the for Council’s use of the Bayside Conference Room with the Port of San Francisco.

Roll Call: Present: Elinor Blake, Chairperson, Sam Altshuler, P.E., Louise Bedsworth, Ph.D., Jeffrey Bramlett, Harold Brazil, Pamela Chang, Irvin Dawid, Emily Drennen, Fred Glueck, William Hanna, Stan Hayes, John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan, Victor Torreano, Linda Weiner, Brian Zamora.

 Absent: Robert Bornstein, Ph.D., Norman A. Lopera, Jr.

Introductions of New Advisory Council Members: Chairperson Blake welcomed Diane Bailey and Emily Drennen in the “Conservation Organization” category and Jeffrey Bramlett in the “Park & Recreation” category.

Role of the Advisory Council: Chairperson Blake noted that the Advisory Council receives referrals from District staff and the Board, and also develops its own issues for review and recommendation. She announced that the Chairs of the Standing Committees for 2004 would be: Harold Brazil – Air Quality Planning; Linda Weiner – Public Health; Louise Bedsworth, Ph.D. – Technical.

COMMENDATION/PROCLAMATION: Chairperson Blake commended outgoing Chairperson Hanna for his leadership of the Council during 2003. He oversaw the development of recommendations regarding intermittent control strategies, particulate matter (PM) abatement, improvements to the state’s vehicle Inspection & Maintenance (I&M) program, refinery flaring, and the optical remote sensing of emissions at refinery fence lines. Mr. Hanna represented the Council at Board of Directors Executive Committee meetings and several Regular meetings, and continued to serve on the Technical Committee and the Applicant Selection Working Group. His leadership was both practical and affable.

PUBLIC COMMENT PERIOD: There were no public comments.

CONSENT CALENDAR:

1. **Approval of Minutes of November 12, 2003.** Mr. Zamora moved approval of the minutes; seconded by Dr. Holtzclaw; carried unanimously.

COMMITTEE REPORTS:

2. **Report of the Air Quality Planning Committee (AQPC).** Mr. Kurucz stated there was no report.
3. **Report of the Technical Committee Meeting of December 9, 2003.** Dr. Bedsworth stated the Committee received presentations from District staff on Bay Area trends in ambient concentrations of ozone precursors and the status of the photochemical modeling for the California Central Ozone Study (CCOS) and the District's 2004 Ozone Attainment Plan.
4. **Report of the Public Health Committee (PHC) Meeting of December 8, 2003.** Mr. Zamora stated that preliminary recommendations were discussed on refinery fence line optical monitoring.

PRESENTATION: "Cumulative Impact Assessments and the Precautionary Principle."

Brian Bateman, Director of Engineering, stated that Cumulative Impact (or Risk) Assessment and the Precautionary Principle have become part of the Environmental Justice (EJ) movement, which concerns disproportionate health impacts in low income and minority communities. The California Environmental Protection Agency (Cal-EPA) EJ Advisory Committee recently recommended that Cumulative Risk Assessment and the Precautionary Principle be included in the state's regulatory programs. According to Cal-EPA, cumulative risk assessment concerns the "total burden of all emissions and discharges in a geographic area" and the federal EPA indicates it is "an analysis, characterization and possible quantification of the combined risks to the human health or the environment from multiple agents or stressors." This leads to the determination of health impacts through considering cumulative impacts.

Cumulative Impact Assessment may be divided into categories of scope and scale. The complexity of the analysis increases with its scope. EPA categorizes the scope of analysis in the following fields:

- Stressors (chemical; biological (pathogens, allergens); physical (temperature, radiation); psychological; socio-economic (availability of health care))
- Routes of Exposure into human physiology (inhalation, ingestion, absorption)
- Pathways and media (indoor or outdoor air, surface water, ground water, soil)
- Sources (activities that create or release stressors; sources can be stationary, such as industry; area-wide sources such as fireplaces; and mobile sources, both on and off-road)
- Receptors and subpopulations (workers, sensitive individuals, ecosystem)
- Exposure conditions (frequency, duration, often distinguished as acute effects which occur in the short-term or chronic effects which are measured over the long-term)
- Endpoints (measures of effects of stressors, such as cancer or asthma, or various irritants)
- Metrics (manner in which health risks are expressed). Maximum risk is deterministically assessed based on a single endpoint, or through stochastic analysis with distributions of risk, or through population exposure analysis to assess cancer burden.

Risk Assessment may be conducted on a range of spatial scales: macro scale (national), meso scale (regional) or micro scale (individual neighborhood or microclimate). The complexity of an analysis does not necessarily increase with scale.

Air Quality Risk Assessment requires data on ambient concentrations in specific locations and/or deposition rates, and these are determined either through monitoring or modeling. Monitoring is considered the most definitive method, but it is limited by costs, pollutant-specific approaches, and the number of monitors. Modeling is more flexible but more uncertain as it is a representation of reality. Most risk assessments are model-based but rely on monitoring to validate the modeling. Prominent risk assessments include the EPA National-Scale Air Toxics Assessment (NATA), the Air Resources Board (ARB) Community Health Program that will assess statewide cancer risk and conduct pilot neighborhood-scale assessment programs in the Barrio Logan (San Diego) and Wilmington (Los Angeles) neighborhoods. The latter two studies are comprehensive air emission risk assessments and will include mobile, area-wide and stationary sources. The Multiple Air Toxics Exposure Study (MATES) in the South Coast AQMD contained strong monitoring and modeling components and found that cancer risk was dominated by mobile sources. The regional scale analysis of this study was considered adequate to estimate spatial impacts. A forthcoming update to this program is in the planning stage and will include some additional micro scale components. The Air Toxics Hot Spots program in California is an incremental, facility-wide risk assessment program. The Bay Area AQMD conducted a limited scope Risk Assessment in 1993 that focused on 54 industrial sources, with three to five facilities between each sub-area. The study focused on individual cancer risk and found that the cumulative concentrations did not significantly increase maximum risk.

Gaps in emissions data pose the greatest methodological challenges. Mobile and area-wide sources are the most uncertain, and their spatial and temporal patterns require further evaluation. While stationary source emissions are better understood, uncertainties arise when evaluating a combination of multiple sources and distinguishing among synergisms and antagonisms. There are different levels of uncertainty in health effects data for different pollutants. The mix of occupational and animal studies also presents some challenges in terms of developing a baseline.

The District's Air Toxics New Source Review (NSR) Program is a pre-construction permitting program that applies to new and modified stationary sources. NSR programs exist for criteria pollutants that are addressed in the Prevention of Significant Deterioration program. This program addresses pollutant-specific cumulative air quality impacts for a project. If the incremental project risk for a given pollutant is below a "significant air quality impact level" a full Cumulative Impact Assessment is not required.

The District's Air Toxics NSR program conducts Health Risk Assessment based on incremental risk at a project level and considers combined effects from multiple pollutants within a project. Staff conducts the health risk screening analysis of a facility. The Health Risk Assessment guidelines from the Cal-EPA Office of Environmental Health Hazard Assessment (OEHHA) are used to estimate health risks. Staff starts with dispersion modeling to focus on micro scale impacts. Land-use features regarding proximate residential neighborhoods, along with specific population exposure categories are evaluated. Toxicity values are applied to calculate health risks both for cancer and non-cancer risks. Staff uses an additive approach to estimate risk due to exposure to different toxic compounds. A permit applicant may provide its own analysis, and if a consultant is hired to perform the analysis, staff will conduct a separate analysis to evaluate the consultant's results. Statewide public noticing requirements for this program require public review for sources located within 1,000 feet of a school site.

The District's Air Pollution Control Officer (APCO) is responsible for risk management at the District and establishes the criteria for permit approval. Projects in which all sources do not use Best Available Control Technology for Toxics (TBACT) will be approved if maximum lifetime cancer risk does not exceed 1 in a million and maximum chronic non-cancer hazard index does not exceed 1.0. Projects in which all sources use TBACT will be approved if maximum lifetime cancer risk does not exceed 10 in a million and maximum chronic non-cancer hazard index does not exceed 1.0. Criteria for perchloroethylene (perc) dry cleaners allow project approval if the facility uses TBACT and all reasonable risk reduction measures such that lifetime cancer risk does not exceed 100 in a million.

The District adopted a risk management policy for diesel stand-by engines during the recent California energy crisis that provided an exemption for emissions that occur during their emergency use. The District intends to modify its Air Toxics NSR program by reducing the trigger level for TBACT for non-cancer risk from 0.2 to 1.0 and also to eliminate the increased risk provision for perc dry cleaners. A review of available technology shows that substitutes for perc, such as high flash-point hydrocarbons (HCs), are entirely sufficient.

The District's Air Toxics NSR program began in 1987. Routine higher risk sources include diesel back-up generators, gasoline dispensing facilities, dry cleaners, crematories, furniture strippers, and gas-fired combustion sources with short stacks. Until 2000, the District averaged 15 risk screens per month. In 2002, the average rose to 50 per month following the removal of the exemption for stand-by diesel engines. Recent advances in risk evaluation preparation include improvements to modeling software and digital data in maps and land feature terrain that are available on the web at little cost.

The comments received to date from community and environmental groups on the District's Toxics NSR program request inclusion of Cumulative Impact Assessment for all permitted sources and the creation of a community risk cap. The above-mentioned project risk levels would be used in this approach. Sophisticated software and database capability would be required to conduct dispersion modeling, source attribution, building structural layout and land-use patterns for facility boundary lines, risk assessment calculation, database management, as well as reporting and mapping functions for micro scale analysis. A computer system that could handle the data for all of the approximately 22,500 sources of toxics in the Bay Area at 12,000 facilities would cost an estimated \$1.2 million.

In making policy judgments, acceptable levels of risk are based on ARB and EPA guidelines. These are based on incremental risk analysis at a project or facility level rather than cumulative risk analysis, for which there are no guidelines at this time. The Cal-EPA EJ Advisory Committee recently urged that such recommendations should be developed. However, it is unclear whether such permitted facilities, which must have BACT, contribute significantly to health impacts cumulatively or individually. Maximum risks tend to be geographically localized from individual facilities, and so cumulative risks may not emerge in a given region. Moreover, data on lifetime cancer risk due to inhalation of average ambient levels of toxic contaminants in the Bay Area indicate that the toxics of greatest concern—formaldehyde, benzene, 1,3-Butadiene and diesel particulate matter—come primarily from mobile sources.

The Precautionary Principle emphasizes "how little harm is possible" rather than "how much harm is allowable." It originated in Germany in the 1970s and was subsequently discussed at several international conferences. The United Nations Conference on Environment and Development has adopted a statement on the Precautionary Principle. In 2000, the European Commission Communication on the Use of the Precautionary Principle linked the Principal to the risk management process, suggesting that

measures that derive from the Precautionary Principle should be proportionate to the risk and the accepted level of health protection. The “Wingspread Statement” that derived from a 1998 science and environmental health conference in Wisconsin characterized the Precautionary Principle as (1) emphasizing precautionary assumptions where causality is not fully established scientifically, (2) shifting the burden from the public to the proponent of the permit activity in question, and (3) requiring the evaluation process to be informed and democratic, involving the affected parties and including a proposed range of alternatives that could include no action. If this approach were applied to a Toxics NSR program, it could have major consequences. The Precautionary Principle has not been used very much in the United States, but the City and County of San Francisco adopted an ordinance last year that covers City actions and requires implementation of principles with criteria regarding anticipatory action, right to know, alternatives assessment, full cost accounting and a participatory decision-making process.

The Cal-EPA EJ Advisory Committee has urged that an alternatives assessment be conducted for new and modified source permitting in areas with a disproportionately high cumulative impact. This would include a “top-down” selection of alternative materials beginning with non-toxics and working to toxics, a justification for using any material other than the least toxic, and other alternatives analyses. The opposition opinion of the California Council on Environmental and Economic Balance (CCEEB) contends that regulators should not mandate chemical and process substitutes because they are not responsible for product performance, safety, warranties or liability. CCEEB further contended that regulators should be limited to setting emission limits and establishing risk levels.

Ms. Weiner noted that some public health department data reveal a high incidence of lung cancer and asthma in neighborhoods without multiple pollution sources. The purchasing department of the City and County of San Francisco is working to implement the Precautionary Principle. The Bay Area Clean Air Task Force is working with the District and EJ Air Quality Coalition to define percentage risk and to evaluate possible sponsorship of a pilot study in a specific community of concern. The Cal-EPA EJ Advisory Committee is also working to develop guidelines on these same matters.

Council members posed additional questions, and Chairperson Blake directed the Standing Committees to discuss them under Agenda Item No. 7. These questions were as follows:

- a) Why are lifetime cancer risks the highest in San Jose, and were wood smoke, dioxins and polycyclic aromatic hydrocarbons included in the analysis?
- b) Does the District use data from on-site workers and the Occupational Safety & Health Administration data for hazard analysis?
- c) Does the Precautionary Principle include such risks as hormone disruptors or mercury content?
- d) Is there any discussion around the concept of financial risk assessment in trying to develop solutions that allow the Precautionary Principle to become manifest, given that the technological solution must be available? Does the process take into account costs relative to the availability, or unavailability, of technology in the initial phase of implementing the Precautionary Principle?
- e) How can this broad concept that covers cumulative impacts and data assessment fit into workable guidelines that will not lead to endless redefinition, and how are the value decisions made by a regulator with regard to criteria concerning product development and environment?
- f) How much of the estimated annual cancer cases, which are estimated to occur in one out of every three persons, are due to air pollution, and what is the percentage of cancer cases that derive from sources other than mobile sources?

- g) To what extent has the District conferred with water quality application of the Precautionary Principle and what can be learned from these other experiences?
- h) Is there synergy between irritants from PM and other cancer causing agents: are effects primarily between or within classes of stresses? Is cancer risk considered additive to an additional irritant?
- i) Can “highly susceptible groups” be included in the discussion of sub-populations, and can maps be developed showing areas of cumulative exposure, even if very generalized, including smoking?
- j) How can the Precautionary Principle be used to address mobile sources?
- k) When was the largest change in risk since the District has started monitoring for ambient air toxics in 1986, and what was the reason attributed to that major change?

RETREAT FORMAT:

6. Round Table Discussion with District’s Management on Key Issues Facing the District, Candidate Assignments Proposed by District Staff and Topics Suggested by Advisory Council Members. Prior to reviewing the Candidate Assignments suggested by staff, the Council members suggested the following topics for review, to which any topics continued from last year would be added, and these were assigned to the Standing Committees for consideration as follows:

- a) Update on Smog Check II: recent program modifications and the outcome of Council recommendations made last year to improve the program. Include forthcoming CARB evaluation of the program and associated vehicle scrappage programs. Include staff topic on reviewing vehicle power through liquid and compressed natural gas. *(AQPC and Technical)*
- b) Land-use/air quality nexus, with reference to the work of other air districts in this area. Include reference to adoption of air quality elements in general plans in the District. *(AQPC)*
- c) Develop a list of disproportionately impacted communities. *(PHC)*
- d) Assess air quality impacts of construction sites on residential neighborhoods, hospitals, schools and include staff regulation through District rules regarding fugitive and visible emissions, as well as California Environmental Quality Act (CEQA) mitigation. *(PHC and Technical)*
- e) Review the regional transportation planning process, and the MTC 2030 plan. *(AQPC)*
- f) Review the Association of Bay Area Government’s Smart Growth planning document and consider how the District might be involved in implementing the recommendations. *(AQPC)*
- g) Continue to review the development of emission inventories of greenhouse gases. *(Technical)*

The Council agreed on the following assignments, including the staff’s Candidate Assignments list:

- 1) Review the control measures for volatile organic compounds (VOCs), nitrogen oxides (NOx) and particulate matter (PM) in the South Coast AQMD attainment plan recently approved by the Air Resources Board (ARB) and make recommendations to the Air Pollution Control Officer (APCO) for implementing them in the Bay Area. *Assigned jointly to the Air Quality Planning and Technical Committees. Comments due in the spring.*
- 2) Review and provide comments to the APCO on the draft Bay Area AQMD State and Federal Air Quality Attainment and Maintenance Plans. Continue participation on the Modeling Advisory Committee and the Ozone Working Group. *Assigned to the Air Quality Planning and Technical Committees. Comments due in the Spring.*

- 3) Review and provide comments to the APCO on the ARB mobile source emission calculation model and its impact on the development of Bay Area attainment plans for ozone. *In addition to hydrocarbons (HC) and nitrogen oxide (NOx), nitrogen dioxide (NO2) and other reactive organics such as formaldehyde may be evaluated to better assess relative reactivity. Assigned to the Technical Committee with a long-range time frame for study and use in future plan development.*
- 4) Review studies and provide comments to the APCO on the impact of further NOx emission reductions on the attainment of the National and State ozone standards in the Bay Area. *Assigned to the Technical Committee with a long-range time frame for use in air quality management planning.*
- 5) Review and provide comments to the APCO on the Toxic New Source Review (NSR) Rule amendments. *Assigned to the Public Health Committee. Recommendations to the full Council due in May.*
- 6) Review and provide comments to the APCO on the draft California Environmental Protection Agency (Cal-EPA)/ARB Environmental Justice implementation protocols. *Assigned to the Public Health Committee. Comments due during the first half of 2004.*
- 7) Review the role of fuel cells, hydrogen, liquid natural gas (LNG) and compressed natural gas (CNG) in fueling the transportation sector of California and the Bay Area. Make recommendations pertaining to the benefits and disadvantages of each technology. *Assigned to the Air Quality Planning and Technical Committees for longer-term analysis.*
- 8) Consider the role of the District in evaluating indoor air quality. What does regulatory authority provide, or is the District's role advisory? *Assigned to the Public Health Committee for long-term review.*
- 9) Complete the review of whether the optical fence line monitoring technology in operation at the ConocoPhillips Refinery in Rodeo should be applied to other refineries and chemical plants in the Bay Area. *Public Health Committee assignment continued from 2003, due mid-year or during the second half of 2004.*
- 10) Identify communities disproportionately impacted by air pollution, and evaluate the air pollution impacts of construction site activities on communities. *Assigned to the Public Health Committee for review in the second half of 2004.*
- 11) Receive an update on Smog Check II and on the implementation of Advisory Council recommendations adopted in 2003 to improve the state's vehicle inspection and maintenance program. *Assigned to the Air Quality Planning Committee for review at mid-year or thereafter.*
- 12) Review Smart Growth implementation and its connection with transit mode shift and regional transportation planning. *Assigned to the Air Quality Planning Committee for review at or after mid-2004.*
- 13) Review and provide comments to the APCO on the impact of daylight savings time on peak ozone concentrations with respect to the one hour and eight hour ozone standards. This topic will be deferred to later in the year pending completion of other topics.

Mr. Dawid urged that topic No. 3 include PM generated from road dust and tire wear, and Mr. Altshuler suggested adding lube oil to the evaluation, as it is relevant to PM_{2.5} analysis. Mr. Kendall replied that this could be included in topic No. 1 under PM control measures. The extent to which the South Coast AQMD might have looked at this issue may be of special note.

7. Convene to Working Lunch for Meetings and Discussion Sessions of the Public Health Committee, Air Quality Planning Committee and Technical Committee. The Advisory Council convened to Standing Committee format at 12:30 p.m.

8. Reconvene to Full Council Format for Follow-up on Committee Discussion Sessions. The Advisory Council reconvened at 1:38 p.m. The Committee Chairs reported out as follows:

Public Health Committee. Ms. Weiner reported that during the first half of 2004, the Committee will comment on the District's NSR program and the Cal-EPA EJ recommendations, and review the update of the Ozone Attainment Plan if time permits. Thereafter, the Committee will complete its recommendations on optical fence line monitoring at refineries. It will then take up the issues of indoor air quality, communities disproportionately impacted by air pollution and construction site activities. The Committee meeting schedule for 2004 is as follows:

- 1:30 p.m., Monday, February 23
- March 10 after the Advisory Council Regular Meeting
- 1:30 p.m., Monday, April 19
- May 12 after the Advisory Council Regular Meeting
- 1:30 p.m. Monday, July 19
- September 8 after the Advisory Council Regular Meeting
- 1:30 p.m., Monday, October 25

Air Quality Planning Committee. Mr. Brazil reported that topic Nos. 1 and 2 would be the Committee's first priority, given the more immediate deadlines. The Committee anticipates involvement with topic No. 5 and may schedule review of that issue based on the minutes of other Committees within the first half of 2004. For the June 1 meeting, the Committee will continue with its review of Smog Check II. Thereafter it will focus on Smart Growth implementation issues, transit mode shift and its connection with Smart Growth, fuel cell technology and regional transportation planning. The Committee meeting schedule for 2004 is as follows:

- 9:00 a.m., Tuesday, February 3
- 9:30 a.m., Tuesday, April 6 (Joint Meeting with the Technical Committee)
- 9:30 a.m., Tuesday, June 1
- 9:30 a.m., Tuesday, August 3
- 9:30 a.m., Tuesday, October 5
- 9:30 a.m., Tuesday, December 7

Technical Committee. Dr. Bedsworth reported that the Committee will first meet on February 13 at 9:30 a.m. to discuss topic No. 1. In April, the Committee will meet jointly with the AQPC on the Ozone Attainment Plan. The Committee will meet again in June to further address that issue. Other meeting dates will be scheduled at a future meeting of the Committee. The next priority will be topic No. 3 on mobile source emission factor modeling. Thereafter the Committee will focus on alternative fuels and combine the analysis with climate change issues.

8. Committee Member Comments/Other Business. Mr. Hess indicated that the state budget was published this week. Advisory Council budget requests for fiscal year 2004/05 should be submitted to the Clerk's Office.

Chairperson Blake requested the Applicant Selection Working Group members contact Stan Hayes regarding convening a meeting to review the applications for the Architect category.

9. Time and Place of Next Meeting. 10:00 a.m., Wednesday, March 10, 2004, 939 Ellis Street, San Francisco, CA 94109.

10. Adjournment. The meeting was adjourned at 2:00 p.m.

James N. Corazza
Deputy Clerk of the Boards

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

DRAFT MINUTES

Advisory Council
Air Quality Planning Committee Meeting
9:00 a.m., Tuesday, February 3, 2004

- 1. Call to Order – Roll Call.** 9:40 a.m. Quorum Present: Harold Brazil, Chairperson, Emily Drennen, Irvin Dawid, Fred Glueck, John Holtzclaw, Ph.D., Kraig Kurucz, Kevin Shanahan. Absent: Pamela Chang.
- 2. Public Comment Period.** There were none.
- 3. Approval of Minutes of July 22 and September 30, 2003.** Dr. Holtzclaw requested that “Bittle” be corrected to “Brittle” in line one of paragraph two on page four of the September 30, 2003 minutes. Mr. Glueck moved approval of the September 30, 2003 minutes as amended, as well as the approval of the July 22, 2004 minutes; seconded by Mr. Shanahan; carried unanimously.
- 4. Control Measure Review.** Dan Belik, Rule Development Section Manager, stated he would review pollution control measure criteria, the legal background concerning them, the control measure suggestions received to date by the District, and the control measures in the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) and the South Coast Air Quality Management District (SCAQMD) that are being evaluated for possible inclusion in the forthcoming update to the District’s Ozone Attainment Plan.

The District’s evaluation criteria for pollution control measures include the type of pollutant controlled, amount and rate of emission reduction, technical feasibility, public acceptability, enforceability, cost effectiveness, socioeconomic impacts, environmental impacts, and determines whether or not the reductions are eligible for credit in the State Implementation Plan (SIP) process by being real, quantifiable, permanent, enforceable and surplus.

The California Clean Air Act (CCAA) requires the District either to achieve a 5% reduction in ozone precursors annually or implement “all feasible measures.” Guidance for defining the latter is derived from “Best Available Retrofit Control Technology” (BARCT) as well as the categories in the CCAA that refer to relative cost-effectiveness, technological feasibility, total pollution reduction potential, rate of reduction, public acceptability and enforceability. The District defines “feasible” as reasonable and necessary; capable of being successfully implemented within a reasonable time period, taking into account economic, environmental, legal, technological and social factors; and either approved or approvable by the California Air Resources Board (CARB).

The federal planning process is less stringent in the consideration of control measures. It requires measures based on all Reasonably Available Control Technology (RACT) but only within the context of local environmental circumstances rather than in consideration of advancing an attainment date. Pollutant transport between States is also a consideration in the federal process.

The District has evaluated 370 pollution control measures. Many were suggested by the Ozone Working Group, community members, the Advisory Council, Board of Directors and CARB, as well as a review of the rules and plans of other air districts in the state. In its preliminary findings, staff has categorized these measures as follows:

- 5 - not enforceable
- 6 - not technically feasible
- 9 - need legislation
- 14 - not cost-effective
- 17 - pose pollutant transport problems
- 29 - require further study
- 29 - require funding
- 31 - potentially viable
- 53 - already implemented
- 82 - offer only negligible emission reductions
- 95 - under the regulatory jurisdiction of other agencies

The District has already adopted many of the control measures that are under consideration in the SJVUAPCD. The SCAQMD is working to develop control strategies that are under the jurisdiction of CARB. Of the potentially viable measures, preliminary findings identify as most promising the SCAQMD measure on miscellaneous industrial coatings and solvent operations. This measure concerns facilities that annually emit greater than 25 tons of volatile organic compound (VOCs) emissions. Similarly, the SJVAPCD measure on sumps, pits and wastewater processing equipment was contained in the District's 2001 Ozone Attainment Plan as a further study measure. This will be the subject of a future Technical Assessment Document. Four potential measures in the SJVAPCD that mitigate nitrogen oxide (NOx) transport include agricultural irrigation engines, stationary gas turbines, water heaters and boilers, and steam generators, boilers and process heaters. Modeling will assess the downwind impacts of NOx reductions from these sources.

Measures requiring further study include (a) an SCAQMD NOx mitigation fee program for planes, trains and ships, the funds from which would be used to reduce emissions elsewhere; (b) an SJVAPCD indirect source mitigation program addressing traffic emission increases resulting from large developments; and (c) stationary source controls in both of these air districts on stationary internal combustion engines, livestock waste, glass melting furnaces, architectural coatings and solvents, commercial and industrial composting and commercial char broilers.

Measures requiring legislative authorization in the SCAQMD relate to off-road vehicles and equipment, an emission fee program for port-related mobile sources, and an emission fee program of \$5,000 per ton of VOC for facilities that emit more than 10 tons annually. In the SJVAPCD, such authorization would be needed for a federally mandated ozone non-attainment fee program.

Measures in the SCAQMD and SJVAPCD that are not technically feasible include further emission reductions from large VOC sources and industrial process operations which would be based on far-reaching emission reduction plans that have not yet been demonstrated to be feasible. The District could consider these as further study measures but cannot incorporate them into an attainment plan.

The District has concluded that some measures are not cost-effective, such as the SJVAPCD measures on boilers, steam generators and process heaters, as well as wineries, and the SCAQMD measure on further emission reductions from restaurant operations.

Control measures in the SCAQMD with either negligible emission reductions or which lack emission sources in the Bay Area include truck stop electrification, urban heat island mitigation and further NO_x reductions from the RECLAIM emissions trading project. Controls on chamber fumigation of agricultural products in the SJVAPCD have no counterparts in the Bay Area.

There are more steam driven oil production wells in the SJVAPCD than in the BAAQMD, and proposed controls in the SJVAPCD on low-pressure flares are not applicable to Bay Area refinery flare controls. There is only one lime kiln in the SJVAPCD and none in the Bay Area. The District has already adopted and implemented a rule for polymeric foam manufacturing, the stringency of which cannot be increased in the Bay Area. The SJVUAPC is considering a similar rule.

Many of the other measures proposed in the SCAQMD are under the regulatory jurisdiction of other agencies—in particular, CARB—and concern engine exhaust, off-road construction, weed trimmers, lawnmowers, and vehicle Inspection and Maintenance (I&M). The proposed control of fuel transfer into aircraft is pre-empted by Federal Aviation Administration regulations. Ground support equipment at airports, low sulfur diesel fuel standards, and land-based emissions at ports are under consideration by the SCAQMD but are under the regulatory jurisdiction of CARB.

In discussion, Mr. Glueck suggested staff consider a measure to reduce government employee work trips through improved transit and telecommuting options. Mr. Belik responded that mobile source emissions account for half of the total emission inventory and are becoming cleaner over time. The effort to reduce the percentage of government employees work trips would be the subject of a transportation control measure (TCM) adopted by the Metropolitan Transportation Commission (MTC), which is holding public workshops and community meetings to promote education regarding the use of carpools, trip linking and taking public transit.

Chairperson Brazil added that TCMs must conform to specific criteria to be eligible for inclusion in the Regional Transportation Plan. Work trips in excess of the number of government employee work trips would have to be reduced to significantly impact mobile source emissions. Changing land-use patterns to make transit usage more convenient provides an ideal approach to reducing vehicle usage, notwithstanding that the Bay Area as a region is already fairly well built-out.

Ms. Drennen inquired as to whether the District's cost-effectiveness criteria for pedestrian and bike facilities may impede project implementation with only marginal air pollution improvements. Jean Roggenkamp, Planning Division Director, responded that the Transportation Fund for Clean Air (TFCA) has assisted in funding bicycle facilities that are associated with commute services, with cost-effectiveness criteria focused on an incentive, rather than regulatory basis. The cost-effectiveness criterion for TFCA projects is \$90,000 per ton of emissions reduced.

Mr. Brazil inquired if District funding criteria posed obstacles to increasing the number of bicycle lockers at BART stations. Mr. Dawid noted that he recently participated in a mobile tour of bike facilities at BART stations and found major differences between them in terms of security, proximity to the station, etc. Mr. Hess responded that staff would investigate this issue.

Mr. Shanahan observed that more progress would be made by the State's air districts in reducing pollution if CARB were to adopt more stringent rules. Mr. Hess replied that CARB recently held an ozone control summit meeting with the State's air districts on pollution control measures and emission reductions. Further emission reductions from heavy-duty trucks and off-road sources could be obtained from additional regulations. Mobile source emissions can be further reduced. The District, the SCAQMD and SJVAPCD each have a seat on the CARB Board of Directors.

Gary Kendall, Technical Division Director, stated that 10% of the vehicle fleet is estimated to emit more than 50% of total vehicle emissions. This poses challenges for both vehicle I&M and scrappage programs. Over the long-term the fleet is going to become cleaner. Mr. Kurucz noted that last year this Committee made several recommendations to improve vehicle I&M and scrappage programs and later this year will receive an update on their implementation. One issue concerns how the Enhanced I&M program in the Bay Area is receiving emission reduction credits. Mr. Hess replied that CARB has added the emission reductions from the Enhanced I&M program into its Emission Factor Model (EMFAC) and it now receives federal emission reduction credit.

Ms. Drennen inquired as to how vehicle I&M and scrappage programs take low-income groups into account, and whether the District facilitates the encouragement of mode shift among low income groups in the Bay Area. Ms. Roggenkamp replied that the Bureau of Automotive Repair (BAR) sponsored a subsidy program geared toward low-income owners whose cars failed the emissions test, but the funds for that program have been cut. The District sponsors a vehicle scrappage program and surveys the program participants. The results suggest that significant emission reductions are achieved. Mr. Kurucz added that last year this Committee found that the number of Bay Area vehicle owners that received a repair waiver was approximately 200. The Committee requested the Deputy Clerk to provide copies of its minutes and reports on I&M.

Mr. Dawid inquired as to the relationship of vehicle speed to air quality. Chairperson Brazil replied that he could refer him to one of the consultants who contracts with MTC to perform this type of analysis. Mr. Dawid and Dr. Holtzclaw added that reducing a three-lane road to two lanes with a turning median tends to increase road capacity to carry cars and reduces vehicular crashes. Mr. Glueck noted that it is not only vehicle age that effects its emission levels but also its mileage. Mr. Kurucz suggested that staff develop emission estimates per category of vehicle. Mr. Shanahan requested that the staff report also compare advanced diesel fuel sports utility vehicles with gasoline powered ones by fuel economy. Mr. Hess noted that such data would prove useful for the analysis of mobile source emissions of ozone precursors and greenhouse gases.

Dr. Holtzclaw suggested that extra credit be given in the SIP for Smart Growth measures because these will reduce pollution over time. Urban heat island strategies relate symbiotically to improved livability and Smart Growth. Mr. Belik responded that quality of life improvements and socio-economic impacts concern public acceptability and the rephrasing of evaluation criteria more than emission reduction credits. From a federal perspective, emission reductions must be enforceable to receive credit, and under the State program all feasible measures must be implemented. Urban heat island measures are most effective in regions with consistently high temperatures.

Mr. Hess added that Advisory Council member Lapera is overseeing the removal of eucalyptus trees in the East Bay. These trees are high emitters of ozone precursors. The District has written to Bay Area cities and counties and requested that they plant trees that emit low levels of ozone precursors.

Mr. Kurucz inquired if further VOC emission reductions were possible, based on the SCAQMD architectural coatings rule, and further, if District the is considering control measures on consumer products. Mr. Belik replied that the SCAQMD architectural coatings rule has been amended twice, and the challenge is whether coatings with further VOC reductions could be successfully applied to all intended applications. CARB has surveyed the coatings rules in California and has obtained product reactivity data from coating manufacturers. CARB also regulates consumer products and has scheduled a round of emission reductions in 2006 followed by another in 2008-2010. No such measures are presently found in the attainment plans of the SCAQMD or SJVAPCD.

Mr. Kurucz inquired if the SCAQMD rule on small water heaters applies to residences. Mr. Belik responded that the rule concerns small industrial water heaters. However, the manufacturers have been unable to meet the emission standard, and therefore they pay fees to the SCAQMD in lieu of attaining that standard. In addition, energy conservation standards also conflict with the emission limits proposed by the SCAQMD, and the manufacturers have recently addressed the SCAQMD Board of Directors with their concerns on this issue.

Mr. Kurucz inquired if the measures under consideration on composting operations are industrial or municipal. Mr. Belik stated that these relate to industrial composting operations that develop large amounts of compost for gardening and farm use. The rule addresses controlling rooms where the compost is stored. The District will review this rule as a further study measure.

Dr. Holtzclaw inquired as to the distinctions in the reactivity of various VOC compounds as it relates to the peak formation of ozone within or downwind from the District. Mr. Belik stated that Dr. William Carter of U.C. Riverside has developed extensive data on the reactivity of VOC compounds. Mr. Hess added that the Modeling Advisory Committee would address this issue in its evaluation of the photochemical modeling analysis that is part of the update to the ozone attainment plan.

Chairperson Brazil thanked District staff for its presentation and noted that the Committee appreciated the opportunity to discuss these control measure suggestions and provide input.

5. **Committee Member Comments/Other Business.** Ms. Drennen requested that staff make a presentation, at a future meeting, about what the District does regarding pedestrian and bike issues in the region, including what funding sources can be used or are already being used, which cannot be used, and what guidelines preclude the use of such funds. It would be useful to review how an exemption might be obtained for small ticket projects that improve air quality but do not meet the \$90,000 per ton cost-effectiveness criterion. Mr. Hess noted that this presentation would be available after the staff's work on the ozone attainment plan has been completed.
6. **Time and Place of Next Meeting.** 9:30 a.m., Tuesday, April 6, 2003, 939 Ellis Street, San Francisco, CA 94109.
7. **Adjournment.** 11:22 a.m.

James N. Corazza
Deputy Clerk of the Boards

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

DRAFT MINUTES

Advisory Council Technical Committee
9:30 a.m., Tuesday, February 24, 2004

1. **Call to Order – Roll Call.** 9:37 a.m. Quorum present: Louise Bedsworth, Ph.D., Chairperson, William Hanna, Stan Hayes, John Holtzclaw, Ph.D. Absent: Sam Altshuler, P.E., Robert Bornstein, Ph.D., Norman A. Lapera, Jr.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of December 9, 2003.** Mr. Hanna moved approval of the minutes; seconded by Dr. Holtzclaw; carried unanimously.
4. **Control Measure Review.** Dan Belik, Rule Development Manager, stated the District is updating its Ozone Attainment Plan (OAP) and has received suggestions on control measures from the Ozone Working Group, California Air Resources Board (CARB), Advisory Council, Board of Directors, community members and downwind air districts. The plans and draft plans of other air districts have also been reviewed. The applicability to the Bay Area Air Quality Management District (BAAQMD) of control measures contained in the plans of the South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is the subject of today's presentation.

Federal evaluation criteria require an air district to adopt all reasonably available control measures in light of local circumstances, except if an attainment date is not advanced, adverse economic or environmental impacts would ensue, or only minor emission reductions would be achieved at a major administrative cost. For measures to be eligible to receive emission credit in the State Implementation Plan (SIP) they must be real, quantifiable, permanent, enforceable and surplus.

The California Clean Air Act (CCAA) requires an air district to achieve either a 5% reduction in ozone precursors annually or to adopt "all feasible measures." No region in California has been able to meet the 5% goal. Therefore, all feasible measures must be adopted. In defining feasibility, transport mitigation regulations and aspects of the state law provide some guidance in taking into account economic, environmental and energy factors, as well as the emission reduction rate.

The BAAQMD considers a control measure feasible if it is reasonable and necessary; capable of being successfully implemented in a reasonable time period, taking into account legal, economic, environmental, social and technological factors; and is approved or approvable by CARB. Evaluation criteria include the pollutant controlled (i.e., volatile organic compounds (VOC) or nitrogen oxide (NOx)), amount and rate of emission reduction, technical feasibility, public acceptability, enforceability, cost effectiveness, socioeconomic impacts, environmental impacts, and whether the reductions are real, quantifiable, permanent, enforceable and surplus.

Mr. Belik noted that the federal Environmental Protection Agency (US EPA) has not adopted rules or guidelines regarding reactivity among VOC compounds. Perhaps as the emission reductions decrease and costs per ton of emissions reduced increase, reactivity may play a greater role in rule feasibility assessment. With regard to the role reactivity plays in influencing ozone formation and transport downwind, Mr. Belik stated that greater weight is given to the total ozone produced rather than to specific rates of production. However, reaction rates have been measured against the one-hour ozone standard in reactivity studies, and this issue is under discussion in some scientific circles. Reactivity would have less impact under the eight-hour ozone standard.

Saffet Tanrikulu, Research & Modeling Manager, stated that while VOC species can be differentiated according to reactivity, the process that converts nitrogen oxide (NO_x) to nitrogen dioxide (NO₂) in the atmosphere takes approximately 20 minutes. Varying levels of VOC reactivity will therefore not likely affect pollution transport. Gary Kendall, Technical Division Director, added that the most modern models allow an emissions inventory, when compiled and disaggregated in space and time, to be queried according to VOC species reactivity profiles for a specific source category at a given point in time. Mr. Hayes noted that the consideration of the time at which a VOC emission would be reduced would be of importance in review of ozone formation.

Mr. Belik stated that staff has reviewed over 370 control measures in its update to the 2004 OAP, and has placed these measures into categories as follows:

- 5 – not enforceable
- 6 – not technically
- 9 – need legislation
- 14 – are not cost effective
- 17 – have potential transport mitigation
- 29 – require funding
- 29 – require further study
- 31 – potentially viable
- 53 – area already implemented in the District
- 82 – offer only negligible reductions
- 95 – are under other jurisdictions.

There are control measures in these plans for which the BAAQMD has no, or very few, sources, or which are already more stringently controlled by it. The BAAQMD has already implemented many of the measures proposed in the SJVUAPCD. It appears that the SCAQMD is adopting measures to force CARB to be more aggressive in adopting regulations. The SCAQMD rule on miscellaneous industrial coatings required add-on controls for the largest paint booths that emit more than 25 tons of VOCs. If applied on an operation-by-operation basis in the Bay Area, this approach may cost-effectively reduce emissions in the BAAQMD. The SJVUAPCD measure on sumps, pits and wastewater processing equipment may also entail notable VOC emission reductions if applied in the Bay Area. It would result in the installation at refineries of water traps in wastewater drain systems and seals after the oil-water separation phase to reduce emissions from wastewater treatment processes.

The potentially viable measures in the SJVUAPCD that, if adopted in the Bay Area, would reduce NO_x transport include controls on agricultural irrigation engines, water heaters and boilers, stationary gas turbines, steam generators and process heaters.

Measures in the SCAQMD that would require further study by the BAAQMD include a federal source mitigation fee program, and an architectural coatings and solvents rule. Further study measures from the SJVUAPCD plan would include an indirect source mitigation program, a measure on NOx emissions from stationary internal combustion engines, glass melting furnaces, livestock waste, commercial and industrial composting and commercial char broilers.

SCAQMD control measures that require legislation include off-road vehicles and equipment, an emission fee program for port-related mobile sources, a program imposing a VOC emission fee of \$5,000 per ton for facilities emitting more than 10 tons per year and a federally mandated ozone non-attainment fee. In reply to Mr. Hayes, Ms. Roggenkamp stated that, for port-related mobile sources, the District will not adopt regulations to implement cold ironing but has recommended that the City of Oakland investigate this through the environmental review process. CARB is also reviewing cold ironing for possible application statewide. Mr. Belik added that the addition of a new port facility or cruise terminal provides an ideal opportunity to implement cold ironing, and it might be considered as a mitigation measure in the permit review process. Mr. Hanna observed that a federal mandate to require cold ironing at all ports in California would minimize adverse the impacts on commerce and industry that would occur if it were applied in a piecemeal manner.

Mr. Belik stated that measures in the SCAQMD plan that are considered by staff to be technically infeasible include further emission reductions from large VOC sources, industrial process operations and residential water heaters. There may be conflict between energy efficiency mandates and existing regulations regarding residential water in the SCAQMD.

Measures in the SCAQMD with negligible emission reductions or for which there are no comparable Bay Area sources include truck stop electrification, urban heat island mitigation, economic incentive programs and additional NOx reductions under the emissions trading RECLAIM project. Similar measures in the SJVUAPCD include asphalt batch plant dryer and heaters, bakery ovens, and can and coil coatings, natural gas fuel specifications, among other rules.

Many of the control measures considered by the SCAQMD are already under CARB jurisdiction. The SCAQMD also wants to improve vehicle Inspection & Maintenance (I&M) beyond its most stringent form. Ms. Roggenkamp added that CARB has recently reviewed areas with further emission reduction potential and is considering a pilot program to replace or upgrade the emission control systems on passenger vehicles. The District is interested in sponsoring such a program.

Chairperson Bedsworth and Mr. Hayes notes that the air quality dynamics in the SJVUAPCD and BAAQMD differ, and ozone control measures implemented in one region would have different impacts on the other. Mr. Belik added that there is a high VOC to NOx ratio in the SJVUAPCD. NOx measures would likely be more effective there than in the SCAQMD.

Chairperson Bedsworth noted that revenue generation for control measures and the need to reduce mobile source emission are key concerns. She inquired as to what authority the District has to generate revenue for emission reduction programs and the extent to which remote sensing of vehicle emissions and vehicle scrappage programs will figure into the update to the OAP. Ms. Roggenkamp replied that vehicle license registration fees at \$20 million fund the Transportation Fund for Clean Air (TFCA) annually. The District also received funds from the Carl Moyer Program for reducing heavy-duty engine emissions. The future of this program is uncertain, and the District recently received what may be the final installment of Moyer program funds.

Mr. Kendall noted that neither CARB nor the Bureau of Automotive Repair (BAR) is enamored of remote sensing technology in the evaluation of vehicular emissions. CARB has a greater interest in vehicle scrappage programs. Ms. Roggenkamp added that the District sponsors a scrappage program for vehicles manufactured prior to 1981. This program has worked well to date.

Mr. Belik stated that there are additional measures in the SCAQMD plan that are regulated by CARB, such as new hand-held and non-hand-held small engines, new off-road gas engines, enhanced vapor recovery at aboveground storage tanks, portable internal combustion engines, the recovery of fuel vapors at marinas, and fuel permeation through gasoline dispensing hoses and promulgates low sulfur fuel standards for diesel. The Federal Aviation Administration regulates aircraft fuel transfer. The Department of Pesticides adopts strategies on pesticide emissions.

There was discussion of the aggregate emissions reductions from measures considered potentially viable, and whether the inclusion of a criterion regarding toxics reductions affects the ranking of control measures. Ms. Roggenkamp responded that staff does not have an aggregate emission reduction estimate for all of the measures it considered. Mr. Belik added that some of the measures are more promising for toxics reductions. While reducing diesel PM is not a part of ozone control strategy development, it may still offer guidance on giving priority to certain control measures.

Mr. Belik added that the SCAQMD's goal is to inspire CARB to require further reinforcement synthetic rubber fuel line hoses to reduce emissions that occur through permeation. Mr. Kendall added that gasoline dispensing nozzles are tested for disconnect spills, leaks and drips. Recently, staff discovered that some metal nozzles retain liquid prior to being returned to its position on the tank and that fuel evaporates into the atmosphere. Standards have since been adopted regarding this design problem, which affects many, though not all, of the gasoline dispensing nozzles in the Bay Area. Eight million gallons of gasoline are dispensed daily in the Bay Area. Therefore the total emission reduction achieved by such a measure is potentially significant.

In reply to questions on the schedule for implementing these measures in the context of updating the OAP, Ms. Roggenkamp stated staff is now in the process of drafting detailed control measure descriptions. Some measures may fall out of consideration and others may become further study measures. This list will be presented to the Ozone Working Group at the end of March. The next step is to issue the draft OAP in May or June for public discussion. While the deadline to submit the District's plan to attain the state one-hour ozone standard was the end of last year, CARB has informed the air districts that are also working on federal plans that they may submit the updated state plan with their SIP submittal. The District was also to have made an attainment demonstration for the one-hour federal standard in April of this year. However, the last three years of ozone monitoring indicate that the District has an attainment record. If the EPA declares this record to constitute attainment, the District will instead submit an Ozone Maintenance Plan for which there is no deadline. EPA Region IX has expressed its intention to review this matter quickly. However, there is no deadline by which it must render its decision.

5. **Committee Member Comments/Other Business.** There was discussion regarding holding a one-hour meeting of the Technical Committee following the Advisory Council Regular meeting on March 10, 2004. Chairperson Bedsworth stated the Committee had decided at the January 14, 2004 Retreat that it would devote its April meeting to the District's SIP submittal and possibly continue that discussion into June, and then take up issues regarding mobile source emission modeling in the summer and fall, with the winter to be devoted to discussing the connection between local air quality actions and global climate change.

Ms. Roggenkamp observed that in April staff could provide an update to the Air Quality Planning and Technical Committees on the ozone planning process, along with comments on mobile source emission modeling since this category figures into the planning process. Staff could also present which of the potentially viable control measures were included in the update to the OAP.

The Deputy Clerk noted that Chairperson Blake has scheduled Advisory Council member Robert Bornstein, Ph.D., to make a presentation at the March 10 Regular Meeting on real-time emissions monitoring in New York City which is part of an environment and security effort. Mr. Kendall added that for the last year District air monitoring staff has conducted biowatch air monitoring. This is distinct from incident management and accidental releases, for which staff has a number of measures available for field collection data. These include hand-held equipment that collects data on various compounds including sulfur, organics, carbon monoxide, among others, and now the capability has been developed to use this equipment for PM data collection as well.

County and city hazardous materials staff are the first-line responders for these types of emergencies. The District is charged with making measurements and collecting samples from a measurement and air monitoring perspective. However, at the request of a facility, District staff have reviewed Risk Management Prevention Plans. Chairperson Bedsworth inquired if the topics raised by Mr. Kendall could be discussed with Dr. Bornstein's presentation. Mr. Kendall indicated that he and a staff member from the Enforcement Division could attend the meeting and provide input.

6. **Time and Place of Next Meeting.** Tentatively, following the Advisory Council Regular Meeting of March 10, 2004, and as per the Committee schedule developed at the Retreat, 1:30 p.m., Tuesday, April 6, 2004, 939 Ellis Street, San Francisco, California 94109.
7. **Adjournment.** 11:27 a.m.

James N. Corazza
Deputy Clerk of the Boards

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

DRAFT MINUTES

Advisory Council Public Health Committee Meeting
1:30 p.m., Monday, February 23, 2004

1. **Call to Order – Roll Call.** 1:35 p.m. Quorum Present: Linda Weiner, Chairperson; Diane Bailey, Elinor Blake, Jeffrey Bramlett, Victor Torreano. Absent: Brian Zamora.
2. **Public Comment Period.** There were no public comments.
3. **Approval of Minutes of December 8, 2003.** Ms. Blake moved approval of the minutes; seconded by Mr. Torreano; carried unanimously.
4. **Cumulative Risk Assessment and the Precautionary Principle.** Chairperson Weiner stated that the Committee is reviewing proposed modifications to the District's Toxics New Source Review (TNSR) program. Both Cumulative Risk Assessment (CRA) and the Precautionary Principle are becoming increasingly important to community groups. Health data indicate that adverse impacts occur in low-income areas with multiple pollution sources. The City and County of San Francisco has adopted the Precautionary Principle and its Purchasing Department is evaluating its practical application. The business community is concerned over the possible financial costs that would be incurred in implementing the Precautionary Principle.

Brian Bateman, Engineering Division Director, stated that TNSR programs have historically focused on the incremental risk from a single project rather than the broader assessment of cumulative risk from other sources within a given area. The risk management policy question that emerges is whether or not the determination of project acceptability should be based on incremental or cumulative risk.

The application of the Precautionary Principle to a TNSR rule concerns whether or not regulatory agencies should require an alternatives analysis to a proposed project. Although an alternatives analysis is presently conducted within the context of the California Environmental Quality Act (CEQA) review process, the issue is whether or not it should become more routine in the permit review process.

Cindy Tuck, General Counsel, California Council on Environmental and Economic Balance (CCEEB) stated that CRA is important as it addresses the pollution to which people are exposed. However, this is a new issue, and policies that address it should do so appropriately. Regional air toxics modeling indicate that mobile sources—in particular, diesel particulate emissions—contribute the most to air toxics risk. Stationary sources also contribute to air toxics risk but to a lesser extent.

The District has evaluated 370 pollution control measures. Many were suggested by the Ozone Working Group, community members, the Advisory Council, Board of Directors and CARB, as well as a review of the rules and plans of other air districts in the state. In its preliminary findings, staff has categorized these measures as follows:

- 5 - not enforceable
- 6 - not technically feasible
- 9 - need legislation
- 14 - not cost-effective
- 17 - pose pollutant transport problems
- 29 - require further study
- 29 - require funding
- 31 - potentially viable
- 53 - already implemented
- 82 - offer only negligible emission reductions
- 95 - under the regulatory jurisdiction of other agencies

The District has already adopted many of the control measures that are under consideration in the SJVUAPCD. The SCAQMD is working to develop control strategies that are under the jurisdiction of CARB. Of the potentially viable measures, preliminary findings identify as most promising the SCAQMD measure on miscellaneous industrial coatings and solvent operations. This measure concerns facilities that annually emit greater than 25 tons of volatile organic compound (VOCs) emissions. Similarly, the SJVAPCD measure on sumps, pits and wastewater processing equipment was contained in the District's 2001 Ozone Attainment Plan as a further study measure. This will be the subject of a future Technical Assessment Document. Four potential measures in the SJVAPCD that mitigate nitrogen oxide (NOx) transport include agricultural irrigation engines, stationary gas turbines, water heaters and boilers, and steam generators, boilers and process heaters. Modeling will assess the downwind impacts of NOx reductions from these sources.

Measures requiring further study include (a) an SCAQMD NOx mitigation fee program for planes, trains and ships, the funds from which would be used to reduce emissions elsewhere; (b) an SJVAPCD indirect source mitigation program addressing traffic emission increases resulting from large developments; and (c) stationary source controls in both of these air districts on stationary internal combustion engines, livestock waste, glass melting furnaces, architectural coatings and solvents, commercial and industrial composting and commercial char broilers.

Measures requiring legislative authorization in the SCAQMD relate to off-road vehicles and equipment, an emission fee program for port-related mobile sources, and an emission fee program of \$5,000 per ton of VOC for facilities that emit more than 10 tons annually. In the SJVAPCD, such authorization would be needed for a federally mandated ozone non-attainment fee program.

Measures in the SCAQMD and SJVAPCD that are not technically feasible include further emission reductions from large VOC sources and industrial process operations which would be based on far-reaching emission reduction plans that have not yet been demonstrated to be feasible. The District could consider these as further study measures but cannot incorporate them into an attainment plan.

The District has concluded that some measures are not cost-effective, such as the SJVAPCD measures on boilers, steam generators and process heaters, as well as wineries, and the SCAQMD measure on further emission reductions from restaurant operations.

Control measures in the SCAQMD with either negligible emission reductions or which lack emission sources in the Bay Area include truck stop electrification, urban heat island mitigation and further NO_x reductions from the RECLAIM emissions trading project. Controls on chamber fumigation of agricultural products in the SJVAPCD have no counterparts in the Bay Area.

There are more steam driven oil production wells in the SJVAPCD than in the BAAQMD, and proposed controls in the SJVAPCD on low-pressure flares are not applicable to Bay Area refinery flare controls. There is only one lime kiln in the SJVAPCD and none in the Bay Area. The District has already adopted and implemented a rule for polymeric foam manufacturing, the stringency of which cannot be increased in the Bay Area. The SJVUAPC is considering a similar rule.

Many of the other measures proposed in the SCAQMD are under the regulatory jurisdiction of other agencies—in particular, CARB—and concern engine exhaust, off-road construction, weed trimmers, lawnmowers, and vehicle Inspection and Maintenance (I&M). The proposed control of fuel transfer into aircraft is pre-empted by Federal Aviation Administration regulations. Ground support equipment at airports, low sulfur diesel fuel standards, and land-based emissions at ports are under consideration by the SCAQMD but are under the regulatory jurisdiction of CARB.

In discussion, Mr. Glueck suggested staff consider a measure to reduce government employee work trips through improved transit and telecommuting options. Mr. Belik responded that mobile source emissions account for half of the total emission inventory and are becoming cleaner over time. The effort to reduce the percentage of government employees work trips would be the subject of a transportation control measure (TCM) adopted by the Metropolitan Transportation Commission (MTC), which is holding public workshops and community meetings to promote education regarding the use of carpools, trip linking and taking public transit.

Chairperson Brazil added that TCMs must conform to specific criteria to be eligible for inclusion in the Regional Transportation Plan. Work trips in excess of the number of government employee work trips would have to be reduced to significantly impact mobile source emissions. Changing land-use patterns to make transit usage more convenient provides an ideal approach to reducing vehicle usage, notwithstanding that the Bay Area as a region is already fairly well built-out.

Ms. Drennen inquired as to whether the District's cost-effectiveness criteria for pedestrian and bike facilities may impede project implementation with only marginal air pollution improvements. Jean Roggenkamp, Planning Division Director, responded that the Transportation Fund for Clean Air (TFCA) has assisted in funding bicycle facilities that are associated with commute services, with cost-effectiveness criteria focused on an incentive, rather than regulatory basis. The cost-effectiveness criterion for TFCA projects is \$90,000 per ton of emissions reduced.

Mr. Brazil inquired if District funding criteria posed obstacles to increasing the number of bicycle lockers at BART stations. Mr. Dawid noted that he recently participated in a mobile tour of bike facilities at BART stations and found major differences between them in terms of security, proximity to the station, etc. Mr. Hess responded that staff would investigate this issue.

Mr. Shanahan observed that more progress would be made by the State's air districts in reducing pollution if CARB were to adopt more stringent rules. Mr. Hess replied that CARB recently held an ozone control summit meeting with the State's air districts on pollution control measures and emission reductions. Further emission reductions from heavy-duty trucks and off-road sources could be obtained from additional regulations. Mobile source emissions can be further reduced. The District, the SCAQMD and SJVAPCD each have a seat on the CARB Board of Directors.

Gary Kendall, Technical Division Director, stated that 10% of the vehicle fleet is estimated to emit more than 50% of total vehicle emissions. This poses challenges for both vehicle I&M and scrappage programs. Over the long-term the fleet is going to become cleaner. Mr. Kurucz noted that last year this Committee made several recommendations to improve vehicle I&M and scrappage programs and later this year will receive an update on their implementation. One issue concerns how the Enhanced I&M program in the Bay Area is receiving emission reduction credits. Mr. Hess replied that CARB has added the emission reductions from the Enhanced I&M program into its Emission Factor Model (EMFAC) and it now receives federal emission reduction credit.

Ms. Drennen inquired as to how vehicle I&M and scrappage programs take low-income groups into account, and whether the District facilitates the encouragement of mode shift among low income groups in the Bay Area. Ms. Roggenkamp replied that the Bureau of Automotive Repair (BAR) sponsored a subsidy program geared toward low-income owners whose cars failed the emissions test, but the funds for that program have been cut. The District sponsors a vehicle scrappage program and surveys the program participants. The results suggest that significant emission reductions are achieved. Mr. Kurucz added that last year this Committee found that the number of Bay Area vehicle owners that received a repair waiver was approximately 200. The Committee requested the Deputy Clerk to provide copies of its minutes and reports on I&M.

Mr. Dawid inquired as to the relationship of vehicle speed to air quality. Chairperson Brazil replied that he could refer him to one of the consultants who contracts with MTC to perform this type of analysis. Mr. Dawid and Dr. Holtzclaw added that reducing a three-lane road to two lanes with a turning median tends to increase road capacity to carry cars and reduces vehicular crashes. Mr. Glueck noted that it is not only vehicle age that effects its emission levels but also its mileage. Mr. Kurucz suggested that staff develop emission estimates per category of vehicle. Mr. Shanahan requested that the staff report also compare advanced diesel fuel sports utility vehicles with gasoline powered ones by fuel economy. Mr. Hess noted that such data would prove useful for the analysis of mobile source emissions of ozone precursors and greenhouse gases.

Dr. Holtzclaw suggested that extra credit be given in the SIP for Smart Growth measures because these will reduce pollution over time. Urban heat island strategies relate symbiotically to improved livability and Smart Growth. Mr. Belik responded that quality of life improvements and socio-economic impacts concern public acceptability and the rephrasing of evaluation criteria more than emission reduction credits. From a federal perspective, emission reductions must be enforceable to receive credit, and under the State program all feasible measures must be implemented. Urban heat island measures are most effective in regions with consistently high temperatures.

Mr. Hess added that Advisory Council member Lapera is overseeing the removal of eucalyptus trees in the East Bay. These trees are high emitters of ozone precursors. The District has written to Bay Area cities and counties and requested that they plant trees that emit low levels of ozone precursors.

Mr. Kurucz inquired if further VOC emission reductions were possible, based on the SCAQMD architectural coatings rule, and further, if District the is considering control measures on consumer products. Mr. Belik replied that the SCAQMD architectural coatings rule has been amended twice, and the challenge is whether coatings with further VOC reductions could be successfully applied to all intended applications. CARB has surveyed the coatings rules in California and has obtained product reactivity data from coating manufacturers. CARB also regulates consumer products and has scheduled a round of emission reductions in 2006 followed by another in 2008-2010. No such measures are presently found in the attainment plans of the SCAQMD or SJVAPCD.

Mr. Kurucz inquired if the SCAQMD rule on small water heaters applies to residences. Mr. Belik responded that the rule concerns small industrial water heaters. However, the manufacturers have been unable to meet the emission standard, and therefore they pay fees to the SCAQMD in lieu of attaining that standard. In addition, energy conservation standards also conflict with the emission limits proposed by the SCAQMD, and the manufacturers have recently addressed the SCAQMD Board of Directors with their concerns on this issue.

Mr. Kurucz inquired if the measures under consideration on composting operations are industrial or municipal. Mr. Belik stated that these relate to industrial composting operations that develop large amounts of compost for gardening and farm use. The rule addresses controlling rooms where the compost is stored. The District will review this rule as a further study measure.

Dr. Holtzclaw inquired as to the distinctions in the reactivity of various VOC compounds as it relates to the peak formation of ozone within or downwind from the District. Mr. Belik stated that Dr. William Carter of U.C. Riverside has developed extensive data on the reactivity of VOC compounds. Mr. Hess added that the Modeling Advisory Committee would address this issue in its evaluation of the photochemical modeling analysis that is part of the update to the ozone attainment plan.

Chairperson Brazil thanked District staff for its presentation and noted that the Committee appreciated the opportunity to discuss these control measure suggestions and provide input.

5. **Committee Member Comments/Other Business.** Ms. Drennen requested that staff make a presentation, at a future meeting, about what the District does regarding pedestrian and bike issues in the region, including what funding sources can be used or are already being used, which cannot be used, and what guidelines preclude the use of such funds. It would be useful to review how an exemption might be obtained for small ticket projects that improve air quality but do not meet the \$90,000 per ton cost-effectiveness criterion. Mr. Hess noted that this presentation would be available after the staff's work on the ozone attainment plan has been completed.
6. **Time and Place of Next Meeting.** 9:30 a.m., Tuesday, April 6, 2003, 939 Ellis Street, San Francisco, CA 94109.
7. **Adjournment.** 11:22 a.m.

James N. Corazza
Deputy Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Haggerty and Members of the Executive Committee

From: Stan Hayes, Chairperson, Applicant Selection Working Group

Date: February 23, 2004

Re: Recommendation for “Architect” Category on the Advisory Council

RECOMMENDED ACTION: Appoint Sanjiv Bhandari to the “Architect” category on the Advisory Council to complete an unexpired term beginning January 1, 2003 and ending December 31, 2004.

BACKGROUND

Pamela O’Malley Chang was appointed to the Advisory Council in the “Architect” category on May 7, 2003 for a two-year term beginning January 1, 2003 and ending December 31, 2004. External circumstances lead her to announce her resignation at the November 12, 2003 Advisory Council Regular Meeting, effective the date that her replacement is appointed by the Board.

DISCUSSION:

A Press Release soliciting applications for the vacancies on the Advisory Council was issued on November 18, 2003, posted on the District’s website and forwarded to the Board of Directors, Advisory Council and Hearing Board. The Press Release was transmitted via fax to the District’s list of newspaper, radio and television recipients and mailed to the individuals on the District’s community and environmental justice group list. It was also e-mailed to the coordinator of the District’s Spare the Air Resources Teams. Targeted e-mailings of the Press Release were sent to the following Bay Area architectural groups and networks:

- Bay Area Chapters of the American Institute for Architects:
 - San Francisco
 - East Bay
 - Santa Clara Valley
 - San Mateo County
 - Redwood Empire (Sonoma County)
- Structural Engineers Association of Northern California
- Architects, Designers, and Planners for Social Responsibility
- Northern California Solar Energy Association

The application period concluded on December 31, 2003. On January 22, 2004 the Working Group reviewed seven new applications and selected five individuals for interview. On February 23, 2004, the Working Group interviewed the five candidates, and after extensive discussion recommends the appointment of Sanjiv Bhandari to the Advisory Council.

Mr. Bhandari is a professional architect, and he is a principal in his own architectural firm. He is currently:

Chair, Architectural Review Board, City of San Ramon
Member, Advisory Council, Metropolitan Transportation Commission

He is formerly:

Member, San Ramon/Contra Costa County Green Building Task Force
Director, American Institute of Architects, San Francisco chapter
Director, Indo-American Chamber of Commerce
(and other affiliations).

His resume is attached.

I will attend the Executive Committee meeting to answer any questions that you may have.

Respectfully submitted,

Stan Hayes
Chairperson
Applicant Selection Working Group

Prepared by: James N. Corazza

FORWARDED BY: _____

SH:jc

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Haggerty and
Members of the Executive Committee

From: Jack Broadbent
Executive Officer/APCO

Date: March 18, 2004

Re: Regional Agency Coordination

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

A task force established by the Metropolitan Transportation Commission and the Association of Bay Area Governments has made recommendations regarding creation of a joint policy committee comprised of representatives of MTC and ABAG. The Air District Board of Directors discussed this issue at the March 3, 2004 Board meeting and directed staff to send a letter to ABAG conveying the Board's perspective on this issue. The letter is attached.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack Broadbent
Executive Officer/APCO

Prepared by: Jean Roggenkamp

Reviewed by: Peter Hess