



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

SPECIAL MEETING OF THE
BOARD OF DIRECTORS
DECEMBER 5, 2012

A special meeting of the Bay Area Air Quality Management District Board of Directors will be held at 9:45 a.m. at the **Regional Agency Headquarters – 6th Floor Conference Room - 390 Main Street, San Francisco, California 94105.**

**Questions About
an Agenda Item**

The name, telephone number and e-mail of the appropriate staff Person to contact for additional information or to resolve concerns is listed for each agenda item.

Meeting Procedures

The public meeting of the Air District Board of Directors begins at 9:45 a.m. The Board of Directors generally will consider items in the order listed on the agenda. However, any item may be considered in any order.

After action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting.

Public Comment Procedures

Persons wishing to make public comment must fill out a Public Comment Card indicating their name and the number of the agenda item on which they wish to speak, or that they intend to address the Board on matters not on the Agenda for the meeting.

Public Comment on Non-Agenda Matters, Pursuant to Government Code Section 54954.3 For the first round of public comment on non-agenda matters at the beginning of the agenda, ten persons selected by a drawing by the Clerk of the Boards from among the Public Comment Cards indicating they wish to speak on matters not on the agenda for the meeting will have three minutes each to address the Board on matters not on the agenda. For this first round of public comments on non-agenda matters, all Public Comment Cards must be submitted in person to the Clerk of the Boards at the location of the meeting and prior to commencement of the meeting. The remainder of the speakers wishing to address the Board on non-agenda matters will be heard at the end of the agenda, and each will be allowed three minutes to address the Board at that time.

Members of the Board may engage only in very brief dialogue regarding non-agenda matters, and may refer issues raised to District staff for handling. In addition, the Chairperson may refer issues raised to appropriate Board Committees to be placed on a future agenda for discussion.

Public Comment on Agenda Items After the initial public comment on non-agenda matters, the public may comment on each item on the agenda as the item is taken up. Public Comment Cards for items on the agenda must be submitted in person to the Clerk of the Boards at the location of the meeting and prior to the Board taking up the particular item. Where an item was moved from the Consent Calendar to an Action item, no speaker who has already spoken on that item will be entitled to speak to that item again.

Up to ten (10) speakers may speak for three minutes on each item on the Agenda. If there are more than ten persons interested in speaking on an item on the agenda, the Chairperson or other Board Member presiding at the meeting may limit the public comment for all speakers to fewer than three minutes per speaker, or make other rules to ensure that all speakers have an equal opportunity to be heard. Speakers are permitted to yield their time to one other speaker; however no one speaker shall have more than six minutes. The Chairperson or other Board Member presiding at the meeting may, with the consent of persons representing both sides of an issue, allocate a block of time (not to exceed six minutes) to each side to present their issue.

BOARD OF DIRECTORS SPECIAL MEETING AGENDA

WEDNESDAY
DECEMBER 5, 2012
9:45 A.M.

REGIONAL AGENCY HEADQUARTERS
390 MAIN STREET – 6th FLOOR
CONFERENCE ROOM
SAN FRANCISCO, CA 94105

CALL TO ORDER

Opening Comments
Roll Call
Pledge of Allegiance

Chairperson, John Gioia
Clerk of the Boards

PUBLIC COMMENT ON NON-AGENDA MATTERS

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3

For the first round of public comment on non-agenda matters at the beginning of the agenda, ten persons selected by a drawing by the Clerk of the Boards from among the Public Comment Cards indicating they wish to speak on matters not on the agenda for the meeting will have three minutes each to address the Board on matters not on the agenda. For this first round of public comments on non-agenda matters, all Public Comment Cards must be submitted in person to the Clerk of the Board at the location of the meeting and prior to commencement of the meeting.

CONSENT CALENDAR (ITEMS 1 – 3)

Staff/Phone (415) 749-

1. Minutes of the Board of Directors Regular Meeting of November 7, 2012 and Board of Directors Special Meeting of November 19, 2012
Clerk of the Boards

2. Board Communications Received from November 19, 2012 through December 4, 2012

J. Broadbent/5052

jbroadbent@baaqmd.gov

A list of communications directed to the Board of Directors received by the Air District from November 19, 2012 through December 4, 2012, if any, will be at each Board Member's place.

3. Air District Personnel on Out-of-State Business Travel

J. Broadbent/5052

jbroadbent@baaqmd.gov

In accordance with Section 5.4 (b) of the Air District's Administrative Code, Fiscal Policies and Procedures Section, the Board is hereby notified that the attached memorandum lists Air District personnel who have traveled on out-of-state business in the preceding month.

COMMITTEE REPORTS AND RECOMMENDATIONS

4. Report of the **Mobile Source Committee** Meeting of December 3, 2012

CHAIR: S. Haggerty

J. Broadbent/5052

jbroadbent@baaqmd.gov

The Committee may recommend Board of Directors' approval of the following items(s):

Projects with Proposed Grant Awards over \$100,000

1. *Approve Carl Moyer Program projects with proposed grant awards over \$100,000.*
2. *Authorize the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program projects.*

United States Department of Energy (DOE): Clean Cities – Implementation Initiatives to Advance Alternative Fuel Markets Grant

1. *Adopt a resolution to authorize the Executive Officer/APCO to accept grant funding and enter into a contract with the United States Department of Energy (DOE) on behalf of the Bay Area Air Quality Management District (Air District).*
2. *Authorize the Executive Officer/APCO to execute contract to expend this funding.*

Current and Future Audits of the Transportation Fund for Clean Air (TFCA) and FYE 2012 TFCA Air District and Regional Fund Program Report on Expenditures and Effectiveness

1. *Receive and file the results of TFCA Audit #13.*
 2. *Authorize the Executive Officer/APCO to execute a contract with Gilbert Associates Inc. for audit services for Audit #14, in an amount that shall not exceed \$85,000, and Audit #15, in an amount that shall not exceed \$150,000.*
 3. *Receive and file the Fiscal Year Ending (FYE) 2012 Transportation Fund for Clean Air (TFCA) Report on Regional Fund Expenditures and Effectiveness.*
5. Report of the **Legislative Committee** Meeting of December 3, 2012

CHAIR: T. Bates

J. Broadbent/5052

jbroadbent@baaqmd.gov

The Committee may recommend Board of Directors' approval of a 2013 legislative agenda.

PRESENTATION(S)

6. Advisory Council Report and Recommendations on Ultrafine Particles **J. Roggenkamp/4646**
jroggenkamp@baaqmd.gov

The Advisory Council will present a report and recommendations from the February 8, 2012 meeting on Ultrafine Particles: Ambient Monitoring and Field Studies, the May 9, 2012 meeting on Ultrafine Particles: Exposure Assessment and the September 12, 2012 meeting on Ultrafine Particles: Exposure Reduction.

7. 390 Main Street, Regional Agency Headquarters – Conceptual Design Presentation and Building Tour

J. Broadbent/5052
jbroadbent@baaqmd.gov

Staff of Perkins + Will, the architectural and engineering design team, will conduct a tour of the building and highlight major features of the renovation program.

8. Status Report on Implementation of Work Plan for Action Items Related to Accidental Releases from Industrial Facilities

J. Broadbent/5052
jbroadbent@baaqmd.gov

Air District staff will provide an update on the implementation of the Work Plan.

CLOSED SESSION

9. **EXISTING LITIGATION (Government Code Section 54956.9(a))**

Pursuant to Government Code Section 54956.9(a), a need exists to meet in closed session with legal counsel to consider the following case(s):

Lehigh Southwest Cement Company v. Bay Area AQMD, Santa Clara County Superior Court, Case No. 112CV236602.

OPEN SESSION

PUBLIC COMMENT ON NON-AGENDA MATTERS

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3

Speakers who did not have the opportunity to address the Board in the first round of comments on non-agenda matters will be allowed three minutes each to address the Board on non-agenda matters.

BOARD MEMBERS' COMMENTS

Any member of the Board, 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)

OTHER BUSINESS

10. Report of the Executive Officer/APCO
11. Chairperson's Report
12. Time and Place of Next Meeting is Wednesday, December 19, 2012, Bay Area Air Quality Management District Office, 939 Ellis Street, San Francisco, California 94109 at 9:45 a.m.
13. Adjournment

CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109

(415) 749-5130
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 Executive Office should be given at least 3 working days prior to the date of the meeting so that arrangements can be made accordingly.
- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the Air District's headquarters at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body. Such writing(s) may also be posted on the Air District's website (www.baaqmd.gov) at that time.

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-4963**

**EXECUTIVE OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS**

DECEMBER 2012

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Mobile Source Committee <i>(Rescheduled from November 2012)</i>	Monday	3	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Legislative Committee <i>(At the Call of the Chair)</i>	Monday	3	10:30 a.m.	4 th Floor Conf. Room
Special Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	5	9:45 a.m.	390 Main Street, 6 th Floor San Francisco, CA
Board of Directors Executive Committee <i>(Meets 3rd Monday of each Month)</i>	Monday	17	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	19	9:45 a.m.	Board Room
Board of Directors Budget & Finance Committee <i>(Meets the 4th Wednesday of each Month) - CANCELLED</i>	Wednesday	26	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee <i>(Meets 4th Thursday of each Month) - CANCELLED</i>	Thursday	27	9:30 a.m.	4 th Floor Conf. Room

JANUARY 2013

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month) - CANCELLED</i>	Wednesday	2	9:45 a.m.	Board Room
Advisory Council Regular Meeting/Retreat <i>(Meets 2nd Wednesday of each Month)</i>	Wednesday	9	9:00 a.m.	Board Room
Special Board of Directors Meeting/Retreat <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	San Jose City Hall 200 East Santa Clara Street San Jose, CA 95113

JANUARY 2013

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Executive Committee <i>(Meets 3rd Monday of each Month)</i>	Monday	21	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets the 3rd Monday of Every Other Month)</i>	Monday	21	10:30 a.m.	4 th Floor Conf. Room
Board of Directors Budget & Finance Committee <i>(Meets the 4th Wednesday of each Month)</i>	Wednesday	23	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Mobile Source Committee <i>(Meets 4th Thursday of each Month)</i>	Thursday	24	9:30 a.m.	4 th Floor Conf. Room

VJ – 11/28/12 (11:50 a.m.)

P/Library/Forms/Calendar/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 21, 2012

Re: Minutes of the Board of Directors Regular Meeting of November 7, 2012 and the
Special Meeting of November 19, 2012

RECOMMENDED ACTION

Approve the attached draft minutes of the Board of Directors Regular Meeting of November 7, 2012, and Special Meeting of November 19, 2012.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Regular Meeting of November 7, 2012, and Special Meeting of November 19, 2012.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Sean Gallagher
Reviewed by: Ana Sandoval

Attachments

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

Board of Directors Regular Meeting
November 7, 2012

DRAFT MINUTES

CALL TO ORDER

Chairperson John Gioia called the meeting to order at 9:49 a.m.

ROLL CALL

Present: Chairperson John Gioia; Vice Chairperson Ash Kalra; Secretary Nate Miley; and Directors John Avalos, Tom Bates, Carole Groom, Scott Haggerty, David E. Hudson, Carol L. Klatt, Liz Kniss, Mary Piepho, Katie Rice, Mark Ross, Jim Spering, Brad Wagenknecht, Ken Yeager and Shirlee Zane.

Absent: Directors Susan Garner, Susan Gorin, Jennifer Hosterman, Edwin M. Lee and Eric Mar.

PLEDGE OF ALLEGIANCE

Directors Avalos and Ross led the Pledge of Allegiance.

NOTED PRESENT: Director Zane was noted present at 9:51 a.m.

OPENING COMMENTS: None.

PUBLIC COMMENT ON NON-AGENDA MATTERS:

Greg Karras, Senior Scientist, Communities for a Better Environment (CBE), addressed the Board regarding Air District involvement in the reconstruction of the Chevron refinery crude unit in Richmond after the incident on August 6, 2012.

Ina Gottlieb, Families for Clean Air, addressed the Board regarding Air District improvement of the residential wood smoke program.

NOTED PRESENT: Director Kniss was noted present at 9:56 a.m.

CONSENT CALENDAR (ITEMS 1 – 4)

- 1. Minutes of the Board of Directors Regular Meeting of October 17, 2012;**
- 2. Board Communications Received from October 17, 2012, through November 6, 2012;**

3. **Air District Personnel on Out-of-State Business Travel; and**
4. **Quarterly Report of California Air Resources Board (CARB) Representative – Honorable Ken Yeager.**

Board Comments: Director Hudson requested a full copy of the CARB report as pages are missing from the copy he received.

Public Comments: None.

Board Action: Director Wagenknecht made a motion to approve Consent Calendar Items 1, 2, 3 and 4; Director Hudson seconded; and the motion was unanimously approved without objection.

COMMITTEE REPORTS AND RECOMMENDATIONS

5. **Report of the Executive Committee Meeting of October 22, 2012**
Chairperson J. Gioia

The Committee met on Monday, October 22, 2012, and upon establishing a quorum, approved the minutes of March 19, 2012, and July 11, 2012.

The Committee received from Thomas M. Dailey, M.D., Chairperson of the Hearing Board, the Quarterly Reports of the Hearing Board for January through March 2012 and April through June 2012, including summaries of the cases and fees collected.

The Committee received from Stan Hayes, Chairperson of the Advisory Council, the Report of the Advisory Council: January through October 2012, including background on the composition and mission of the Council and a summary of recent meetings.

The Committee received the staff presentation Particulate Matter Planning, including an overview of particulate matter and its health effects; an analysis of the sources, control measures and trends in particulate matter within the Bay Area; a review of the air quality planning requirements of CARB and U.S. Environmental Protection Agency (EPA) and the Air District's plans for compliance with the national standard for particulate matter; a review of the New Source Review (NSR) Rule Amendments as they apply to particulate matter; and next steps.

The Committee received the staff presentation Senate Bill 1339 – Commute Benefits Legislation, including overviews of the provisions of the bill and staff plans regarding outreach and implementation.

The Committee meeting on Monday, November 19, 2012, is canceled.

Board Comments: None.

Public Comments: None.

Board Action: Chairperson Gioia made a motion to approve the report of the Executive Committee; Director Wagenknecht seconded; and the motion was unanimously approved without objection.

6. Report of the Budget and Finance Committee Meeting of October 24, 2012

Chairperson C. Groom

The Committee met on Wednesday, October 24, 2012, and approved the minutes of April 25, 2012.

The Committee received the First Quarter Financial Report – Fiscal Year (FY) 2012-13. The Committee reviewed the General Fund revenues and expenses, Air District investments, fund balances and vendor payments in excess of \$70,000 without Board review.

The Committee reviewed the Air District Financial Status, including the ongoing challenge in financial trends, the multi-year response by the Air District, miscellaneous events in fiscal year end (FYE) 2012 and an updated projection of the reserve fund. The Committee discussed mid-year budget adjustments and recommends that the Board increase the FYE 2013 contribution to Other Post-Employment Benefits (OPEB) from \$1,000,000 to \$2,000,000. The recommendation is based on unaudited FYE 2012 reserves that exceed those projected in the 2010 multi-year plan, and on the fact that recent FYs have included \$2,000,000 contributions to OPEB.

The Committee received the staff report California Air Monitoring Network Assessment, which included potential gaps and/or duplicative monitoring efforts under the Primary Quality Assurance Organizations approach. The Committee recommends that the Board amend the FYE 2013 budget to recognize a \$200,000 EPA Grant and award a \$200,000 contract to Providence Engineering and Environmental Group to perform an assessment of the air monitoring network throughout California.

The Committee received the staff report Amend Air Monitoring Section's Budget to Allow for Development of Two New Air Monitoring Stations Near Bay Area Roadways and discussed the recently revised EPA regulations as well as the number and location of air monitoring sites required. The Committee directed staff to prioritize additional monitoring in the Tri-Valley region and near the City of Richmond, taking note that EPA approval of sites is required if EPA grant funds are used. The Committee recommends that the Board amend the FYE 2013 budget to increase the Air Monitoring budget, under Program 802, by a total of \$367,744 in response to an EPA grant of \$400,000 to develop air monitoring sites near Bay Area freeways.

The next meeting of the Committee is Wednesday, December 26, 2012, at 9:30 a.m.

Board Comments: None.

Public Comments: None.

Board Action: Director Groom made a motion to approve the report and recommendations of the Budget and Finance Committee; Director Hudson seconded; and the motion was unanimously approved without objection.

7. Report of the Mobile Committee Meeting of October 25, 2012

Chairperson S. Haggerty

The Committee met on Thursday, October 25, 2012, and approved the minutes of September 27, 2012.

The Committee reviewed Projects with Proposed Grant Awards Over \$100,000 and recommends Board approval of two projects that will replace four pieces of marine equipment operating in the Oakland area and authorization for the Executive Officer/Air Pollution Control Officer (APCO) to enter into agreements for those projects.

The Committee then received an update on Grant Funding, including overviews of proposed funding from the EPA – National Clean Diesel Program and California Energy Commission (CEC) Alternative – Renewable Fuels and Vehicle Technologies Program. The Committee recommends that the Board adopt a resolution to authorize the Executive Officer/APCO to accept up to \$5.7 million in grant funding by entering into one contract with the EPA and one contract with the CEC on behalf of the Air District and authorization for the Executive Officer/APCO to execute all necessary contracts to expend this funding.

The Committee also considered approval of Transportation Fund for Clean Air (TFCA) County Program Manager Fund Policies for FYE 2014 and recommends that the Board approve proposed TFCA County Program Manager Fund Policies to govern allocation of FYE 2014 County Program Manager funds.

The next meeting of the Committee is on Monday, December 3, 2012, at 9:30 a.m.

Board Comments: None.

NOTED PRESENT: Director Bates was noted present at 10:04 a.m.

Public Comments: None.

Board Action: Director Haggerty made a motion to approve the report and recommendations of the Mobile Source Committee; Director Piepho seconded; and the motion was unanimously approved without objection.

8. Report of the Public Outreach Committee Meeting of October 31, 2012 Chairperson M. Ross

The Committee met on Wednesday, October 31, 2012, and approved the minutes of July 19, 2012.

The Committee received the staff summary of 2012 Spare the Air Every Day Season, including reviews of the campaign, community events, media outreach and social media utilization, the employer program, Spare the Air resource teams, and campaign results.

The Committee received the staff overview of 2012-2013 Winter Spare the Air Campaign, including plans for outreach, advertising, media outreach, social media, alert notifications and local government outreach. The Committee also received flash drives with copies of outreach materials to distribute in their communities. The Board has at their places flash drives with Winter Spare the Air materials on them for distribution.

The Committee received the staff update of the Public Participation Plan, including background, an overview of the project phases through April 2013, the proposed workshop strategy, and plans for

outreach and engagement. Michael Kent, Hazardous Materials Ombudsman, Contra Costa County, addressed the Committee regarding his role within the County and relative to County residents.

The Committee received the staff update of the Website Assessment, including project background and summary, assessment findings, preliminary recommendations, and next steps. This project is ongoing and a request for proposals will be issued for the next phase of the project.

The next meeting of the Committee is at the call of the Chair.

Board Comments: None.

Public Comments: None.

Board Action: Director Ross made a motion to approve the report of the Public Outreach Committee; Director Avalos seconded; and the motion was unanimously approved without objection.

PRESENTATION

9. Particulate Matter (PM) Report and Summary of PM Planning Requirements

Jean Roggenkamp, Deputy APCO, introduced the topic and David Burch, Principle Environmental Planner of Planning, Rules & Research, who gave the staff presentation PM Planning, which included background, health effects, analysis, sources, control program, trends, state implementation plan requirements, emission inventory, NSR rule amendments and next steps.

Director Zane asked, regarding Slide 4, PM Health Effects, whether the premature mortality information is included in the District's outreach efforts and discussed the importance of the same with Ms. Roggenkamp.

Mr. Burch continued the staff presentation.

Director Piepho noted, regarding slide 6, Sources of Fine PM, that the percentages in the pie chart differ from those listed in the public outreach material. Ms. Roggenkamp explained that the pie chart includes both primary and secondary contributions while the public outreach material only addresses primary. The Board and Ms. Roggenkamp discussed the importance of generating consistent material that does not further complicate an already difficult concept and the desire to balance that with generating material that accurately speaks to the need to address both contributions.

Director Rice asked, regarding slide 6, Sources of Fine PM, if the information in the pie chart is consistent for each region within the Bay Area and suggested it differs so the public outreach material be tailored accordingly. Ms. Roggenkamp responded that the pie chart is region wide. Chairperson Gioia and Directors Ross and Zane agreed that information tailored to each region would be valuable.

Director Kniss asked, regarding slide 6, Sources of Fine PM, whether pollen was taken into account as a PM contributor. Ms. Roggenkamp responded that pollen may occasionally be captured as PM. Director Kniss and Ms. Roggenkamp discussed current and potential District recommendations regarding tree planting.

Director Bates suggested, regarding slide 6, Sources of Fine PM, that multiple strategies are needed and asked if staff might come back with some proposals. Ms. Roggenkamp agreed and said they would be a part of the next Clean Air Plan.

Mr. Burch continued the staff presentation.

Mr. Burch noted, regarding slide 9, Trends in PM_{2.5} Concentrations, the uneven downward trend is attributed to variations in meteorological conditions from year to year.

Director Zane asked, regarding slide 10, Bay Area status: 24-hr PM_{2.5} std, if there is no data prior to 2006. Mr. Burch said it exists but was excluded from slide 10 since it pre-dates the current standard.

Mr. Burch concluded the staff presentation.

Board Comments:

Director Kniss noted the PM Report, page 48, regarding climate change and asked what the Air District is doing to deal with the issue. Mr. Burch responded that the relationship between climate change and PM_{2.5} is a complicated one, as some PM_{2.5} appears to have cooling properties while others do not, and the studies continue. Director Kniss requested information regarding Mr. Broadbent's upcoming presentation at the District sponsored EPA District 9 symposium about black carbon and its impact on climate.

Director Wagenknecht expressed his appreciation for being technically in attainment with the PM_{2.5} requirements and the direction taken by staff.

Chairperson Gioia noted the work of the Advisory Council of the Air District.

Public Comments: None.

Board Action: None; informational only.

PUBLIC HEARINGS

10. Public Hearing to Consider Adoption of Proposed Amendments to Air District New Source Review (NSR) and Title V Permitting Regulations (Regulation 2, Rules 1, 2, 4 and 6) and Adoption of a California Environmental Quality Act (CEQA) Environmental Impact Report (EIR)

Mr. Broadbent introduced Alexander Crockett, Assistant Counsel of Counsel's Office, who gave the staff presentation Updates to BAAQMD New Source Review and Title V Permitting Programs, Proposed Amendments to Regulation 2 - Rules 1, 2, 4, and 6, including a summary of existing permitting programs, regulatory developments, proposed amendments, public outreach and significant input, EIR, proposed effective date and proposed resolution.

Director Zane asked, regarding slide 10, Recent Regulatory Developments, what is meant by the EPA having historically never been able to approve the Air District's Prevention of Significant Deterioration provisions. Mr. Crockett responded that he has been unable to determine why but it has

almost uniformly been the case for most of the air districts for decades and it is now clear that it must be addressed so there is one District regulation, as approved by the EPA.

Mr. Crockett concluded the staff presentation with the exception of slides 14 through 18, inclusive, and 20, to be presented at the continued public hearing.

Chairperson Gioia opened the public hearing.

Board Comments: None.

Public Comments:

Roger Lin, Staff Attorney, CBE, addressed the Board requesting clarification regarding the inclusion of secondary pollutants in the best available control technology (BACT) regulatory program and to request Air District oversight of the Richmond crude unit rebuild by Chevron.

Guy Bjerke, Manager, Bay Area Region & State Safety Issues, Western States Petroleum Association, addressed the Board to request the Air District avoid establishing a second definition of “modification” that differs from that established by the EPA and that the NAAQS protection requirement be removed, as it is unnecessary in light of federal requirements.

Bill Quinn, Vice President, California Council for Environmental and Economic Balance, addressed the Board to echo the comments of Mr. Bjerke.

Mark Strehlow, Air Program Manager, Pacific Gas and Electric Company, addressed the Board to echo the comments of Mr. Bjerke and Mr. Quinn in regards to the request to remove the NAAQS protection requirement.

Susan Gustofson, Staff Environmental Engineer, Valero Refining Company, addressed the Board to suggest that staff invited but often disregarded comments from the regulated community in formulating today’s proposal and requested further discussion of issues that have arisen.

Mr. Broadbent said secondary emissions will be included in the BACT regulatory program and staff need to discuss the same with CBE; an update on the Richmond crude unit rebuild process will be presented at the Board meeting on November 19, 2012; staff hopes to resolve the two “modifications” definition issue with the EPA before the next public hearing; and comments regarding the NAAQS modeling requirement are noted as staff continue to work on the proposal before the continued public hearing.

Chairperson Gioia continued the public hearing to December 5, 2012 (Note: now scheduled for December 19, 2012).

Director Piepho urged staff to find a long-term solution to this complex issue, having successfully addressed so many issues already, even if postponing the process is required to do so.

Chairperson Gioia noted staff’s hard work on the matter and said that there are times when issues arise at the intersection of the Air District’s role in protecting the public health and the interests of industry.

Mr. Broadbent stated that some outstanding issues can be narrowed further before the matter comes back before the Board.

Don Cuffel, Environmental Engineering Manager, Valero Energy Corporation, addressed the Board regarding unintended implications of this regulation that is used by the regulated community to make determinations about potential projects and asked the Board to be mindful of whether the proposal streamlines the process or adds uncertainty and asked for careful consideration of the PSD limits issue.

Board Action: None; informational only.

11. Public Hearing to Consider Adoption of Fine Particulate Matter (PM_{2.5}) Emissions Inventory

Mr. Broadbent waived the staff presentation PM_{2.5} Emissions Inventory.

Chairperson Gioia opened the public hearing.

Board Comments: None.

Public Comments: None.

Chairperson Gioia closed the public hearing.

Board Action: Director Haggerty made a motion, seconded by Director Ross and carried unanimously without objection to adopt the staff recommended emissions inventory for fine particulate matter and authorize staff to transmit the inventory to CARB.

PUBLIC COMMENT ON NON-AGENDA MATTERS: None.

BOARD MEMBERS' COMMENTS: None.

OTHER BUSINESS

12. Report of the Executive Officer/APCO:

Mr. Broadbent presented an update on the Winter PM_{2.5} Season; announced a Special Meeting of the Board on November 19, 2012; reported that progress is being made on the Air District office at 390 Main Street and the Board will receive a status report at its meeting on December 5, 2012; announced that the last Board meeting of the year will be on December 19, 2012; and said the 2013 Board retreat will likely be held in Santa Clara County.

13. Chairperson's Report:

Chairperson Gioia announced the reappointment of Director Groom to the Board by the San Mateo County Board of Supervisors and that a Special Meeting of the Board will be held on November 19, 2012.

Mr. Broadbent announced the appointment of Wayne Kino to the position Director of Compliance & Enforcement.

14. **Time and Place of Next Meeting:** Monday, November 19, 2012, Bay Area Air Quality Management District Office, 939 Ellis Street, San Francisco, California 94109 at 9:45 a.m.
15. **Adjournment:** The Board of Directors meeting adjourned at 11:49 a.m.

Sean Gallagher
Clerk of the Boards

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

Board of Directors Regular Meeting
November 19, 2012

DRAFT MINUTES

CALL TO ORDER

Chairperson John Gioia called the meeting to order at 9:48 a.m.

ROLL CALL

Present: Chairperson John Gioia; Vice Chairperson Ash Kalra; Secretary Nate Miley; and Directors Tom Bates, Susan Gorin, Carole Groom, David E. Hudson, Carol L. Klatt, Liz Kniss, Eric Mar, Mark Ross, Jim Spering, Brad Wagenknecht and Shirlee Zane.

Absent: Directors John Avalos, Susan Garner, Scott Haggerty, Jennifer Hosterman, Edwin M. Lee, Mary Piepho, Katie Rice and Ken Yeager.

PLEDGE OF ALLEGIANCE

Chairperson Gioia led the Pledge of Allegiance.

OPENING COMMENTS: None.

PUBLIC COMMENT ON NON-AGENDA MATTERS: None.

PRESENTATIONS

1. Update on Chevron Richmond Refinery Rebuild of Crude Unit #4

Chairperson Gioia and Jack Broadbent, Executive Officer/Air Pollution Control Officer (APCO), made introductory comments.

NOTED PRESENT: Director Bates was noted present at 9:55 a.m., thereby establishing a quorum.

Director Zane asked for a Board briefing regarding the cause of the incident. Chairperson Gioia responded that this information was provided to the Board at a previous meeting. Mr. Broadbent added that a number of investigations as to the cause are still underway and final decisions will not be available for a couple of months. Director Zane asked if the State Attorney General is involved. Messrs. Broadbent and Bunger responded that they are not aware of any formal involvement by the attorney general and identified other agencies involved.

Jeffrey McKay, Deputy APCO, gave the staff presentation Update on Chevron Refinery Rebuild of Crude Unit #4, including units affected by the fire, Chevron's permit application, repair tracking, the Air District's scope of work, a progress summary and next steps.

NOTED PRESENT: Director Kniss was noted present at 10:01 a.m.

Chairperson Gioia noted the jurisdiction of the City of Richmond (City) over some of the issues involved, as further detailed in the letter to the City from the U.S. Chemical Safety and Hazard Investigation Board (CSB) dated November 17, 2012.

Director Zane expressed her concern with the pace of the rebuild process when the investigations are incomplete. Mr. McKay said the elements of the Air District's permit process include rebuild specifications, the investigations are instead focused on maintenance and other elements, and that staff would not proceed without the knowledge that what is being built coincides precisely with the plans provided, however, it is a separate issue from the investigations. Director Zane disagreed and asked who is reviewing submissions from Chevron. Mr. Broadbent clarified that Chevron is undertaking the rebuild within the existing permit and Air District staff are exercising every authority available to them in reviewing each component of every submission; if a new permit is required then a different review process would be triggered; and the metallurgy issue identified in the CSB letter is not within the Air District's purview. Director Zane suggested the law allows Chevron to rebuild but the Air District has a responsibility to do as much as possible and asked which staff members are reviewing submissions from Chevron. Mr. Broadbent identified the staff.

Chairperson Gioia said the Air District needs to coordinate its efforts with those of the City, as there is a perception that Chevron is moving forward with the rebuild in the face of incomplete investigations. Mr. Kino said the CSB is focusing on the root cause at this point so there is no further information on metallurgy beyond the guidance provided in the aforementioned letter.

Director Ross asked who will be the ultimate arbiter of the materials used and asked what the fugitive emissions reduction is estimated to be after the installation of the new equipment. Mr. McKay said it is too early to provide an estimated reduction. Mr. Broadbent added that a significant reduction is not expected.

NOTED PRESENT: Director Wagenknecht was noted present at 10:24 a.m.

Barbara Smith, Senior Business Manager, Chevron Refinery, gave the presentation Richmond Refinery: Crude Unit Repairs, including incident investigation and repair timeline, permitting, crude unit overview, inspection and repair, mechanical integrity materials and inspections, cooling tower repair, emissions reductions and summary.

Chairperson Gioia suggested, regarding slide 12, Mechanical Integrity – Materials, pausing the rebuild to address the perception that Chevron is proceeding without all of the information available and asked what Chevron's plan is in terms of pipe replacement. Ms. Smith said the City paused its consideration of applications pending a meeting with Chevron and the involved agencies. Chairperson Gioia clarified that Chevron is not moving forward with pipe replacement efforts until that issue is resolved. Ms. Smith said that is correct.

Director Mar commented on Chevron's role in recent City elections and a currently pending application to process dirtier crude, and asked for a response. Ms. Smith said the application is a modernization project to provide production flexibility. Director Mar asked if it allows a doubling of the amount of sulfur in the crude. Ms. Smith said yes and crudes with those levels of sulfur have been reliably and safely processed by the industry for many years.

Director Zane asked about the monitoring of corrosion rates. Ms. Smith said that sulfur is an inherent component of crude oil, is a factor but not the main factor in corrosion, and said Chevron will continue its program of monitoring and enhancing its facilities. Director Zane asked about Chevron's participation in the City election. Ms. Smith said Chevron believes the public should have factual information available to them about candidates running for City Council.

Chairperson Gioia clarified that Chevron will not move forward with the pipe replacement without a resolution with the City and CSB. Ms. Smith said they are unable to proceed without permits from the City.

Ms. Smith concluded the presentation.

Randy Sawyer, Chief Environmental Health and Hazardous Materials Officer, Contra Costa County (County), addressed the Board regarding the status of the County investigation and the rebuild process.

Director Zane asked how the County Department of Public Health has addressed the influx of residents to hospitals following the incident. Mr. Sawyer said that an investigation is underway. Chairperson Gioia said that at least one of the involved hospitals is conducting its own investigation. Director Zane asked that County public health officials work with their counterparts at the Air District. Mr. Sawyer said that is being done.

Cora Gherga, Acting Deputy Chief of Enforcement, California Division of Occupational Safety and Health (CalOSHA), addressed the Board regarding CalOSHA's jurisdiction, mission, operations and scope of involvement after the incident on August 6, 2012.

Chairperson Gioia asked if CalOSHA has permit authority. Ms. Gherga said no with the exception of construction permits, they only review the permits deemed necessary by other agencies and have no regulatory authority.

Director Zane asked for information relative to citations issued by CalOSHA. Ms. Gherga said the matter is still under investigation with a deadline of February 6, 2013. Director Zane asked if any Chevron staff were hospitalized. Ms. Gherga said four people were hospitalized for minor injuries, including fire fighters, refinery operators and contractors.

Director Bates asked if CalOSHA had any pipe inspection responsibility before the incident and Ms. Gherga said no. Director Bates asked if CalOSHA will proactively address the matter throughout the state should pipe corrosion be identified as the root cause. Ms. Gherga said yes, pending the result of the investigation.

COMMITTEE REPORTS AND RECOMMENDATIONS

2. Report of the Nominating Committee Meeting of November 7, 2012

Chairperson J. Gioia

The Committee met on Wednesday, November 7, 2012, and approved the minutes of November 2, 2011.

The Committee considered nomination of Board Officers for the 2013 Term of Office and recommends Ash Kalra as Chairperson, Nate Miley as Vice Chairperson and Carole Groom for Secretary.

The next meeting of the Committee is at the call of the Chair.

Board Comments: None.

Public Comments: None.

Board Action: Chairperson Gioia made a motion to approve the report and recommendations of the Nominating Committee; Director Wagenknecht seconded; and the motion was unanimously approved without objection.

CONSENT CALENDAR (ITEMS 3 – 4)

3. Board Communications Received from November 7, 2012, through November 18, 2012; and

4. Quarterly Report of Executive Office and Division Activities for the Months of July 2012 – September 2012.

Board Comments: None.

Public Comments: None.

Board Action: Director Hudson made a motion to approve Consent Calendar Items 3 and 4; Director Ross seconded; and the motion was unanimously approved without objection.

COMMITTEE REPORTS AND RECOMMENDATIONS (CONTINUED)

5. Report of the Personnel Committee Meeting of November 8, 2012

Chairperson B. Wagenknecht

The Committee met on Thursday, November 8, 2012, and approved the minutes of July 23, 2012.

The Committee received the Advisory Council Interview summary material for the Public Health and Conservation Organization categories, conducted interviews of applicants for each, and recommends Board approval of incumbent reappointments and the appointments of Heather Forshey for the Public Health category and Timothy O'Connor for the Conservation Organization category.

The next meeting of the Committee is at the call of the Chair.

Board Comments: None.

Public Comments: None.

Board Action: Director Wagenknecht made a motion to approve the report and recommendations of the Personnel Committee; Director Hudson seconded; and the motion was unanimously approved without objection.

PRESENTATIONS (CONTINUED)

1. Update on Chevron Richmond Refinery Rebuild of Crude Unit #4 (continued)

Mary Wesling, Enforcement Coordinator, EPA, addressed the Board regarding the operations and responsibilities of the agency, an investigation overview pending the results and jurisdictional matters.

Chairperson Gioia asked if the EPA is providing input to the involved agencies and what sort. Ms. Wesling said the EPA is meeting with the parties weekly to discuss matters such as technical issues, demolition work and investigations. Chairperson Gioia asked if the EPA will issue an opinion. Ms. Wesling said yes and they will be available at the close of the investigation. Chairperson Gioia asked what happens if the investigation is closed after the rebuild is complete. Ms. Wesling said Chevron will be provided recommendations soon and expressed her confidence that all the involved parties will not allow a rebuild until these issues are resolved.

Greg Karras, Senior Scientist, Communities for a Better Environment (CBE), gave a presentation Update to the BAAQMD Board on Chevron's Richmond Refinery Crude Unit Fire on 6 August 2012, including recent findings and actions needed now.

Board Comments:

Chairperson Gioia asked about the Air District's authority generally. Mr. Broadbent said the Air District is part of a team that includes federal, state and local officials; emissions are within the jurisdiction of the Air District and every effort is being made in that regard; avoidance of future incidents of a similar nature are something all parties are working to avoid; and the answer to the metallurgy issue is one to be prescribed by the City and involved fire authorities through the multi-jurisdictional collaborative. Chairperson Gioia asked about Air District authority under the flare management rule.

Director Ross asked the Air District's role in ongoing maintenance inspections. Mr. Broadbent, Director Ross and Mr. Kino discussed past Chevron remodel work and Air District inspections for air quality emissions.

Director Kalra said that campaign finance reform is needed; the CSB letter shows excellent cooperation by Chevron; the collaboration by the involved agencies is commendable; this presents an opportunity to consider opportunities to exercise all available Air District authority to address safety because failures in infrastructure lead to incidents that are within the jurisdiction of the Air District

even if the underlying failure may not be; and urged greater collaboration with the CSB in light of their expertise.

Director Zane asked how rebuild efforts can be classified as improving upon the existing facilities when the investigations are not yet complete and urged the Air District to exert its authority in every way possible.

Director Hudson said the City and involved fire authorities have been identified as the arbiters regarding the metallurgy issue but correspondence from both are noticeably absent from the material provided today and requested their input. Mr. Broadbent said City fire services are contracted with the County, a number of City departments are involved, and City administration is working to compile it. Director Hudson asked that all the involved parties continue to communicate with the Board.

Director Bates asked if Mr. Karras' suggestion that the flare rule grants authority to the Air District to get more involved in the rebuild is correct. Mr. Bunger said he would report back.

Mr. Broadbent said that staff is looking at everything and taking responsibility in every reasonable way but the pipe material is not within the Air District's purview. Mr. Broadbent added that the Air District is working with the City.

Director Bates urged Air District staff to consider performing a top-down evaluation of how this incident should have been handled in the ideal. Director Bates said the question is who needs to be empowered, as this seems to be a state issue, and the incident response to date implies the need for a holistic analysis. Mr. Broadbent said there is a bigger and broader issue in need of discussion relative to the age of the facilities in the state and the evolution of materials used.

Director Sperring said it is important not to vilify corporations, just as it is important to prosecute them for violations of law or the public trust; and recalled that the incident was an accident and should be evaluated in that light so as to determine how processes can be improved and that appears to be happening; added that staff almost undoubtedly has matters in hand; and opined that piping material seems like an important component of a comprehensive discussion but that local officials have sited houses around this refinery and others like it for decades and bear some responsibility for the ramifications of the incident.

Chairperson Gioia said he lives close to the refinery and has for some time; the Air District should exert its authority to the greatest extent possible, assist with organizing the efforts of the various involved agencies and provide guidance to the public in determining which agency is ideally suited to address various issues; the City should not be left to decide on the metallurgy issue; and it is important and in the best interest of all involved for the parties to take the time to establish a consensus among them before moving forward regardless of rights to do otherwise under the law.

Director Sperring requested a matrix be prepared that identifies which agency is responsible for the various components involved. Mr. Broadbent said it would be delivered through the Stationary Source Committee.

Director Zane asked Chevron to provide a written explanation of the need to rush the rebuild.

Director Ross said the Air District has responsibilities relative to a number of refineries and asked for a detail of the Air District's jurisdiction in terms of inspections.

Chairperson Gioia noted the importance of input from the CSB as they are free from the constraints suffered by CalOSHA and the EPA as they conduct their respective investigations.

Public Comments:

Greg Feere, Contra Costa Building Trades Council, addressed the Board to attest to the slow pace of the rebuild contrary to what is being said and to request that additional delays be avoided in light of Chevron's cooperativeness with this project to date.

Michael Hernandez, Plumbers and Steamfitters Local #342, addressed the Board regarding the importance of moving forward with a safe rebuild for the sake of jobs creation.

Roger Lin, Staff Attorney, CBE, addressed the Board to note the confusing information provided by Chevron regarding piping permits from the City and to suggest that a facility constructed in 1976 that is being rebuilt now may be improperly identified as not being a new source/rebuild.

John Zieshenne, Chief Executive Officer, M.A. Hays Company, addressed the Board in support of the process as it is currently.

Diane Bailey, Senior Scientist, Natural Resources Defense Council, addressed the Board to echo the comments of Messrs. Karras and Lin regarding a thorough analysis of BACT.

Eduardo Martinez, Richmond Progressive Alliance, addressed the Board regarding Chevron's approach to politics and business as being inconsistent with its statements in this forum.

Arthur Hatchett, Greater Richmond Interfaith Program, addressed the Board in support of the process as it is currently and to note Chevron's long-standing commitment to the community.

Mr. Broadbent said that staff will report back to the Stationary Source Committee in the first quarter of 2013 and continue to work with the involved agencies in the meantime.

Chairperson Gioia recalled that staff is reviewing the possibility of increasing Air District fines and asked if there is information sharing between the investigations. Mr. Broadbent said there is.

Director Zane asked for Board updates. Mr. Broadbent agreed. Chairperson Gioia opined that it is important for the Air District to exercise both its formal and informal authorities to the greatest extent possible and restated the importance of CSB's recommendations and the perception developing relative to a rebuild that occurs prior to the completion of the investigations.

Board Action: None; informational only.

6. Status Report on Implementation of Work Plan for Action Items Related to Accidental Releases from Industrial Facilities

Chairperson Gioia continued this matter to the next meeting of the Board.

PUBLIC COMMENT ON NON-AGENDA MATTERS: None.

BOARD MEMBERS' COMMENTS: None.

OTHER BUSINESS

7. Report of the Executive Officer/APCO:

Mr. Broadbent recommended the Board meeting on December 5, 2012, be held at the future District office building, located at 390 Main Street, San Francisco, and that the continued public hearing on Regulation 2 be postponed to December 19, 2012, as a result.

8. Chairperson's Report:

Chairperson Gioia announced the cancellation of the Budget & Finance Committee meeting on December 26, 2012, the Mobile Source Committee meeting on December 27, 2012, and the Board meeting of January 2, 2013.

9. Time and Place of Next Meeting:

Wednesday, December 5, 2012, future Bay Area Air Quality Management District Office, 390 Main Street, San Francisco, California 94105 at 9:45 a.m.

10. Adjournment: The Board of Directors meeting adjourned at 12:56 p.m.

Sean Gallagher
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 15, 2012

Re: Board Communications Received from November 19, 2012 through December 4, 2012

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

A list of communications directed to the Board of Directors received by the Air District from November 19, 2012 through December 4, 2012, if any, will be at each Board Member's place at the December 5, 2012 Board meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Vanessa Johnson
Reviewed by: Ana Sandoval

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 15, 2012

Re: District Personnel on Out-of-State Business Travel

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

In accordance with Section 5.4 (b) of the District's Administrative Code, Fiscal Policies and Procedures Section, the Board is hereby notified that the following District personnel have traveled on out-of-state business:

The report covers the out-of-state business travel for the period November 1, 2012 through November 30, 2012. Out-of-state travel is reported in the month following travel completion.

DISCUSSION

Saffet Tanrikulu, Research & Modeling Manager, attended the 2nd Korea-US Symposium on Air Environment Policies in Seoul, S. Korea November 26 – November 30, 2012. All expenses will be paid by the Korean Ministry of Environment.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: David Glasser
Reviewed by: Jack M. Colbourn

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 28, 2012

Re: Report of the Mobile Source Committee Meeting of December 3, 2012

PROPOSED RECOMMENDED ACTION

The Committee will consider recommending the Board of Directors approval of the following items:

A) Projects with Proposed Grant Awards over \$100,000:

1. Approve Carl Moyer Program (CMP) projects with proposed grant awards over \$100,000.
2. Authorize the Executive Officer/Air Pollution Control Officer (APCO) to enter into agreements for the recommended CMP projects.

B) United States Department of Energy (DOE): Clean Cities – Implementation Initiatives to Advance Alternative Fuel Markets Grant:

1. Adopt a resolution to authorize the Executive Officer/APCO to accept grant funding and enter into a contract with the DOE on behalf of the Bay Area Air Quality Management District (Air District).
2. Authorize the Executive Officer/APCO to execute contracts to expend this funding.

C) Current and Future Audits of the TFCA and Fiscal Year Ending (FYE) 2012 TFCA Air District and Regional Fund Program Report on Expenditures and Effectiveness:

1. Receive and file the results of TFCA Audit #13 (Attachments 1 and 2).
2. Authorize the Executive Officer/APCO to execute a contract with Gilbert Associates, Inc., for audit services for Audit #14, in an amount that shall not exceed \$85,000, and for Audit #15, in an amount that shall not exceed \$150,000.
3. Receive and file the FYE 2012 TFCA Report on Regional Fund Expenditures and Effectiveness (Attachment 3).

D) None; informational item, receive and file.

BACKGROUND

The Committee will meet on Monday, December 3, 2012, and receive and consider the following reports:

- A) Projects with Proposed Grant Awards over \$100,000.
- B) DOE: Clean Cities – Implementation Initiatives to Advance Alternative Fuel Markets Grant.
- C) Current and Future Audits of the TFCA and FYE 2012 TFCA Air District and Regional Fund Program Report on Expenditures and Effectiveness.
- D) Port Truck Program Update.

Attached are the staff memos that will be presented in the Committee packet.

Chairperson Scott Haggerty will provide an oral report of the Committee meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

- A) None. Through the CMP, Mobile Source Incentive Fund and TFCA, the Air District distributes “pass-through” funds to public agencies and private entities on a reimbursement basis. Administrative costs for both programs are provided by each funding source.
- B) None. Administrative funding for the DOE project (including Air District staff time) will be provided through the grant.
- C) None. As required by California Health and Safety Code Section 44242(a), the costs of TFCA audits are taken from the TFCA motor vehicle registration fee surcharges. Resources for Audit #13 were identified in the Air District’s FYE 2012 budget.
- D) None. The Air District receives funding for the administration of these programs as part of the TFCA and California Goods Movement Bond programs.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Sean Gallagher
Reviewed by: Ana Sandoval

Attachments

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Scott Haggerty and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 27, 2012

Re: Projects with Proposed Grant Awards over \$100,000

RECOMMENDATIONS:

Recommend the Board of Directors:

1. Approve Carl Moyer Program projects with proposed grant awards over \$100,000.
2. Authorize the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program projects.

BACKGROUND

The Bay Area Air Quality Management District (Air District) has participated in the Carl Moyer Program (CMP), in cooperation with the California Air Resources Board (ARB), since the program began in fiscal year 1998/1999. The CMP provides grants to public and private entities to reduce emissions of oxides of nitrogen (NOx), reactive organic gases (ROG) and particulate matter (PM) from existing heavy-duty engines by either replacing or retrofitting them. Eligible heavy-duty diesel engine applications include on-road trucks and buses, off-road equipment, marine vessels, locomotives, stationary agricultural pump engines and forklifts.

Assembly Bill 923 (AB 923 - Firebaugh), enacted in 2004 (codified as Health and Safety Code Section 44225), authorized local air districts to increase their motor vehicle registration surcharge up to an additional \$2 per vehicle. The revenues from the additional \$2 surcharge are deposited in the Air District's Mobile Source Incentive Fund (MSIF). AB 923 stipulates that air districts may use the revenues generated by the additional \$2 surcharge for projects eligible for grants under the CMP.

Since 1991, the Transportation Fund for Clean Air (TFCA) program has funded projects that achieve surplus emission reductions from on-road motor vehicles. Sixty percent (60%) of TFCA funds are awarded directly by the Air District through a grant program known as the Regional Fund that is allocated on a competitive basis to eligible projects proposed by project sponsors. Funding for this program is provided by a \$4 surcharge on motor vehicles registered within the San Francisco Bay Area as authorized by the California State Legislature. The statutory

authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242.

On March 7, 2012, the Board of Directors authorized Air District participation in Year 14 of the CMP, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to \$100,000. On November 18, 2009, the Air District Board of Directors authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with TFCA funds, with individual grant award amounts up to \$100,000.

CMP and TFCA projects with grant award amounts over \$100,000 are brought to the Committee for consideration at least on a quarterly basis. Staff reviews and evaluates the grant applications based upon the respective governing policies and guidelines established by the ARB and/or the Air District's Board of Directors.

DISCUSSION

Carl Moyer Program:

The Air District started accepting applications for CMP Year 14 projects on July 23, 2012. The Air District has approximately \$15 million available for CMP projects from a combination of MSIF and CMP funds. Project applications are being accepted and evaluated on a first-come, first-served basis.

As of November 13, 2012, the Air District had received 16 project applications. Of the applications that have been evaluated between October 9, 2012 and November 13, 2012, three (3) eligible projects have proposed individual grant awards over \$100,000. These projects will replace ten (10) pieces of off-road equipment, and install infrastructure to allow locomotives to connect to electrical power during layovers at the San Jose Diridon station. These projects will result in the reduction of over 4 tons of NO_x, ROG and PM per year. Staff recommends allocating \$738,748 to these projects from a combination of CMP funds and MSIF revenues. Attachment 1 to this staff report provides additional information on these projects.

Attachment 2 lists all of the eligible projects that have been received by the Air District as of November 13, 2012, and summarizes the allocation of funding by equipment category (Figure 1), and county (Figure 2). This list also includes the Voucher Incentive Program (VIP) on-road replacement projects awarded since the last committee update. Approximately 55 % of the funds have been awarded to projects that reduce emissions in highly impacted Bay Area communities.

TFCA:

No TFCA applications requesting individual grant awards over \$100,000 received as of November 13, 2012 are being forwarded for approval at this time.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. Through the CMP, MSIF and TFCA, the Air District distributes “pass-through” funds to public agencies and private entities on a reimbursement basis. Administrative costs for both programs are provided by each funding source.

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Anthony Fournier
Reviewed by: Damian Breen

- Attachment 1: BAAQMD Year 14 Carl Moyer Program/MSIF projects with grant awards greater than \$100,000 (evaluated between 10/9/12 and 11/13/12)
- Attachment 2: Summary of all CMP Year 14/MSIF and VIP approved/eligible projects (as of 11/13/12)

AGENDA 4 - ATTACHMENT 1

BAAQMD Year 14 Carl Moyer Program/ Mobile Source Incentive Fund projects
with grant awards greater than \$100k (Evaluated between 10/9/12 and 11/13/12)

Project #	Applicant name	Equipment category	Project type	Proposed contract award	Emission Reductions (Tons per year)			County
					NOx	ROG	PM	
14MOYL1	Peninsula Corridor Joint Powers Board	Locomotive	Wayside power installation of eight (8) electrical locomotive connections at the San Jose Diridon Station	\$ 330,000.00	1.488	0.079	0.032	Santa Clara
14MOY5	SOILAND Co Inc.	Off-road	Replacement of one (1) off-road, diesel powered loader & one (1) off-road, diesel-powered backhoe replacement	\$ 202,610.00	1.540	0.118	0.043	Sonoma
14MOY16	Stone Bridge Cellars Inc.	Off-road	Replacement of eight (8) off-road, diesel powered tractors	\$ 206,138.00	0.909	0.206	0.079	Napa
				\$ 738,748.00	3.937	0.403	0.154	

AGENDA 4 - ATTACHMENT 2

Summary of all CMP Yr 14/ MSIF and VIP approved/ eligible projects (As of 11/13/12)

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
14MOY2	Off-road	Loader replacement	1	\$ 45,176.00	Bordessa Dairy	0.135	0.023	0.007	APCO	Sonoma
14MOY3	Off-road	Loader replacement	1	\$ 98,511.00	Blakes Landing Farms, Inc. (Dairy)	0.448	0.078	0.028	APCO	Marin
14MOY4	Marine	Engine replacement	2	\$ 227,786.00	C & W Diving Services, Inc. (Vessel: "Taylor Anne II")	1.033	0.057	0.039	11/7/2012	Alameda
14MOY7	Marine	Engine replacement	2	\$ 108,400.00	C & W Diving Services, Inc. (Vessel: "STELLA LIND")	0.318	-0.011	0.020	11/7/2012	Alameda
14MOY8	Off-road	Tractor replacement	1	\$ 24,400.00	Lamoreaux Vineyards LLC	0.116	0.024	0.008	APCO	Napa
14MOY9	Off-road	Tractor replacement	1	\$ 23,241.00	Andrea Bartolucci dba Madonna Estate (Vineyard)	0.098	0.020	0.007	APCO	Napa
14MOYL1	Locomotive	Wayside power installation	8	\$ 330,000.00	Peninsula Corridor Joint Powers Board	1.488	0.079	0.032	TBD	Santa Clara
14MOY5	Off-road	Loader & backhoe replacement	2	\$ 202,610.00	SOILAND Co Inc.	1.540	0.118	0.043	TBD	Sonoma
14MOY16	Off-road	Tractor replacement	8	\$ 206,138.00	Stone Bridge Cellars Inc.	0.909	0.206	0.079	TBD	Napa
VIP72	VIP	Truck replacement	1	\$ 45,000.00	Bhin Trucking LLC	2.786	0.056	0.000	APCO	Santa Clara
VIP73	VIP	Truck replacement	1	\$ 40,000.00	Bhin Trucking LLC	2.458	0.049	0.000	APCO	Santa Clara
VIP74	VIP	Truck replacement	1	\$ 40,000.00	Fredrick Shumate	2.458	0.049	0.000	APCO	San Francisco
VIP75	VIP	Truck replacement	1	\$ 40,000.00	Kirvin Holtz	2.481	0.052	0.000	APCO	Sonoma
VIP76	VIP	Truck replacement	1	\$ 20,000.00	Rosalio Calderon	0.849	0.010	0.019	APCO	Santa Clara
VIP77	VIP	Truck replacement	1	\$ 15,000.00	Michael Feuquay	0.306	0.008	0.000	APCO	Santa Clara
VIP78	VIP	Truck replacement	1	\$ 35,000.00	Michael Feuquay	1.380	0.020	0.040	APCO	Santa Clara
VIP79	VIP	Truck replacement	1	\$ 25,000.00	Michael Feuquay	1.006	0.015	0.029	APCO	Santa Clara
VIP80	VIP	Truck replacement	1	\$ 45,000.00	Ernest Gonzales	2.735	0.086	0.000	APCO	Alameda
VIP81	VIP	Truck replacement	1	\$ 35,000.00	Santos Construction Inc.	2.149	0.056	0.000	APCO	Contra Costa
VIP83	VIP	Truck replacement	1	\$ 10,000.00	STAR-TAM INC	0.638	0.004	0.000	APCO	Alameda
VIP84	VIP	Truck replacement	1	\$ 10,000.00	San Miguel Trans Inc	0.629	0.013	0.000	APCO	Sonoma
VIP85	VIP	Truck replacement	1	\$ 35,000.00	Continental Tow	0.582	0.004	0.008	APCO	Contra Costa
VIP86	VIP	Truck replacement	1	\$ 30,000.00	Continental Tow	0.498	0.003	0.006	APCO	Contra Costa
VIP87	VIP	Truck replacement	1	\$ 35,000.00	Gill Hardial Singh	0.714	0.018	0.000	APCO	Alameda
VIP88	VIP	Truck replacement	1	\$ 35,000.00	Robert Cox/Christopher A Rockenbaugh DBA Continental Towing	0.582	0.004	0.008	APCO	Contra Costa
VIP89	VIP	Truck replacement	1	\$ 10,000.00	T1 Trucking, Inc.	0.205	0.004	0.000	APCO	San Mateo
VIP90	VIP	Truck replacement	1	\$ 45,000.00	Guidotti Trucking, Inc.	0.929	0.019	0.000	APCO	Santa Clara
VIP91	VIP	Truck replacement	1	\$ 45,000.00	Daniel Edward Crothers	0.926	0.020	0.000	APCO	Mendocino
VIP92	VIP	Truck replacement	1	\$ 20,000.00	Sequoia Landscape Mtls, Inc.	0.412	0.009	0.000	APCO	Sonoma
VIP93	VIP	Truck replacement	1	\$ 10,000.00	Cotati Brand Eggs Foods Services	0.214	0.001	0.000	APCO	Sonoma
VIP94	VIP	Truck replacement	1	\$ 35,000.00	Joel Delozier	0.716	0.015	0.000	APCO	Solano
VIP95	VIP	Truck replacement	1	\$ 45,000.00	Brian Russel Raven DBA: Raven Trucking	0.926	0.020	0.000	APCO	Solano
VIP96	VIP	Truck replacement	1	\$ 40,000.00	Bernardini Enterprises, Inc.	0.819	0.016	0.000	APCO	San Mateo
33 Projects			50	\$ 2,011,262.00		33.483	1.145	0.373		

Figure 1: CMP/ MSIF Funding Distribution by Equipment Category as of 11/13/12

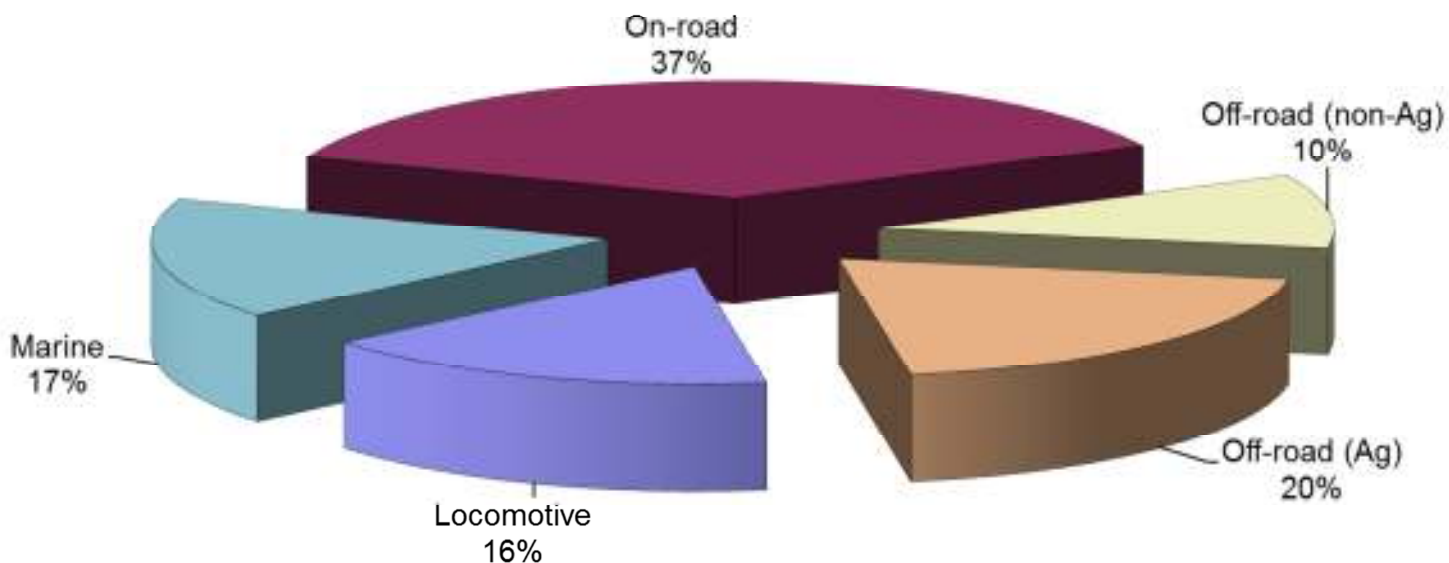
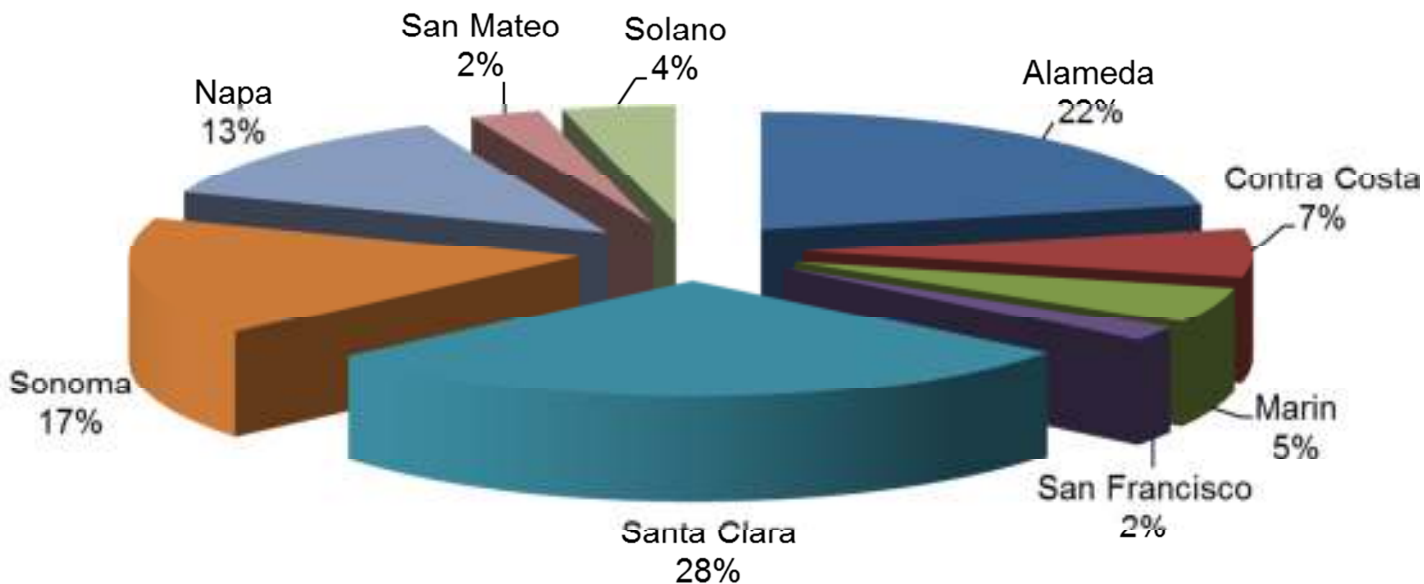


Figure 2: CMP/ MSIF Funding Distribution by County as of 11/13/12



Note: These charts include data for all projects less than and greater than \$100k, and the projects being considered as part of this report.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Haggerty and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 27, 2012

Re: United States Department of Energy (DOE): Clean Cities - Implementation
Initiatives to Advance Alternative Fuel Markets Grant

RECOMMENDED ACTION:

Recommend Board of Directors:

- Adopt a resolution to authorize the Executive Officer/APCO to accept grant funding and enter into a contract with the United States Department of Energy (DOE) on behalf of the Bay Area Air Quality Management District (Air District).
- Authorize the Executive Officer/APCO to execute contract to expend this funding.

BACKGROUND

The Air District has received notice from the DOE that it has been awarded a grant for up to \$1 million to reduce emissions from mobile sources. The DOE grant was awarded from the Clean Cities Program to advance alternative fuel markets by eliminating barriers to the deployment of alternative fuel vehicles (AFV) and infrastructure at California workplaces and in California fleets. The California Fleets and Workplace Alternative Fuels Project is a statewide effort to develop templates and best practices for permitting AFV refueling infrastructure, collaborate with colleges on first responder training, promote workplace electric vehicle (EV) charging, and work with fleets to implement petroleum reduction strategies.

DISCUSSION

On June 18, 2012, the Air District submitted a proposal to the DOE on behalf of the California Fleets and Workplace Alternative Fuels Project. The Air District's Partners in this Project are the South Coast Air Quality Management District, California Plug-In Electric Vehicle Collaborative, California Clean Cities Coalitions, California Center for Sustainable Energy, CALSTART, Advanced Transportation Technology and Energy (ATTE) Initiative Centers in Cerritos Community College, Cypress College, Long Beach Community College, San Diego Miramar College, West Valley College, College of the Desert, and the City College of San Francisco and the California Fuel Cell Partnership. The Partners provide a multi-disciplinary

team to deliver a project that advances alternative fuel markets by concentrating on eliminating the barriers to vehicle and infrastructure deployment in California workplaces and employer fleets.

The Air District and its Partners were awarded \$1 million from the DOE on November 19, 2012, for a comprehensive, California State-wide program composed of the following four elements: Policy Initiatives, Barrier Reduction Initiatives, Safety and Training Initiatives and Market Development/Outreach Initiatives.

The project leverages an existing statewide partnership on electric vehicle deployment under a separate DOE grant and California's experience in the installation of over 460 natural gas fueling stations and 23 hydrogen stations. Additionally, the project leverages relationships of the Clean Cities Coalitions with California fleets in 13 separate areas throughout the State. Successful completion of the project will advance alternative fuel markets in the state and will assist California and the nation in achieving its air quality, greenhouse gas emissions and energy independence goals.

Staff recommends that the Air District Board adopt a resolution to accept the DOE funding. The resolution states the title of the person authorized to accept the award and enter into a contract with the DOE. The resolution commits the Air District to comply with requirements of the DOE and authorizes the Air District to accept the grant funds from the DOE. The resolution also states that the Air District certifies via the resolution to attain the outputs and outcomes described in its application to the DOE.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. Administrative funding for the DOE project (including Air District staff time) will be provided through the grant.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Joseph Steinberger
Reviewed by: Damian Breen

Attachment

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2012-_____

**A Resolution of the
Board of Directors of the Bay Area Air Quality Management District
Authorizing the Executive Officer/Air Pollution Control Officer to Enter into One
Contract with the United States Department of Energy (DOE)**

WHEREAS, the Air District has been awarded one grant from the DOE for up to \$1.0 million to advance alternative fuel markets by eliminating barriers to the deployment of alternative fuel vehicles and infrastructure at California workplaces and in California fleets;

WHEREAS, funds have been made available through the DOE Office of Energy Efficiency and Renewable Energy (EERE) Program;

WHEREAS, DOE does not require a minimum match in funding;

WHEREAS, the Air District is an eligible project sponsor for DOE funds;

WHEREAS, the Air District certifies via this resolution that it will attain the outputs and outcomes described in its application to the DOE.

NOW, THEREFORE, BE IT RESOLVED that the Air District is authorized to execute grant contract for funding for the DOE project described above.

BE IT FURTHER RESOLVED that the Air District is an eligible sponsor of DOE funded projects.

BE IT FURTHER RESOLVED that there is no pending or threatened litigation that might in any way adversely affect the proposed DOE grant contract, or the ability of the Air District to deliver such project.

BE IT FURTHER RESOLVED that the Air District authorizes its Executive Officer or designee to enter into grant contract on behalf of the Air District with DOE to advance alternative fuel markets by eliminating barriers to the deployment of alternative fuel vehicles and infrastructure at California workplaces and in California fleets as referenced in this resolution.

BE IT FURTHER RESOLVED that the Air District authorizes the acceptance of DOE EERE Program funds and commits to comply with the requirements of the program.

The foregoing resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director _____, seconded by Director

_____, on the ____ day of _____, 2012 by the following vote
of the Board:

AYES:

NOES:

ABSENT:

John Gioia
Chair of the Board of Directors

ATTEST:

Nate Miley
Secretary of the Board of Directors

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Scott Haggerty and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 27, 2012

Re: Current and Future Audits of the Transportation Fund for Clean Air (TFCA) and
FYE 2012 TFCA Air District and Regional Fund Program Report on
Expenditures and Effectiveness

RECOMMENDED ACTIONS:

Recommend Board of Directors:

1. Receive and file the results of TFCA Audit #13 (Attachments 1 and 2).
2. Authorize the Executive Officer/APCO to execute a contract with Gilbert Associates Inc. for audit services for Audit #14, in an amount that shall not exceed \$85,000, and Audit #15, in an amount that shall not exceed \$150,000.
3. Receive and file the Fiscal Year Ending (FYE) 2012 Transportation Fund for Clean Air (TFCA) Report on Regional Fund Expenditures and Effectiveness (Attachment 3).

BACKGROUND

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) to impose a \$4 surcharge on motor vehicles registered within its nine-county jurisdiction to fund projects that reduce on-road motor vehicle emissions. The Air District allocates these funds to eligible projects through the Transportation Fund for Clean Air (TFCA). The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code (HSC) Sections 44241 and 44242.

Sixty percent (60%) of TFCA funds are awarded directly by the Air District to eligible programs implemented directly by the Air District (the Smoking Vehicle, enhanced mobile source enforcement and the Spare the Air Programs) and through a grant program known as the Regional Fund. The remaining forty percent (40%) of TFCA funds are forwarded to a designated agency within each Bay Area county to be distributed via a grant program known as the County Program Manager Fund.

HSC Section 44242 requires that the Air District perform an audit on all program or projects funded with TFCA monies. To fulfill this requirement, the Air District selects an independent auditor. On June 15, 2011, the Air District's Board of Directors selected Gilbert Associates, Inc. to conduct Audit #13, the results of which are presented in this report. Under the terms of that selection, the Board has the ability to extend the contract with Gilbert Associates, Inc. for up to an additional two years.

In addition, HSC Section 44241 requires that the Board hold an annual public hearing to review the expenditure of TFCA funds to determine their effectiveness in improving air quality.

DISCUSSION

Current TFCA Audit

Gilbert Associates, Inc. (Gilbert) conducted fiscal audits of TFCA Air District and Regional Fund projects that were completed between July 1, 2009 and June 30, 2011 (projects audited on an annual basis) and County Program Manager Fund projects that were completed between July 1, 2008 and June 30, 2011 (projects are audited on a biennial basis). The audits were conducted from December 2011 through July 2012. Gilbert Associates conducted field work and completed and issued audit reports to each organization audited, and to the Air District for its TFCA funded programs.

The audit results are presented in the attached Audit Summary Reports prepared by Gilbert Associates (Attachment 1 - Regional Fund, Attachment 2 - County Program Manager Fund). These Reports are compilations of the individual audit reports performed in each Fund and list the audited projects in Appendix B. Each organization was provided an opportunity to respond in writing to any findings and those responses are included in the individual audit reports.

While the auditors did note findings in this current audit, the overall number of findings has decreased since the previous audits. Specifically, the Regional Fund Audit Summary Report for the current audit noted four (4) project sponsor findings, down from nine (9) in the last audit. Moreover, there were no oversight findings attributable to the Air District as there were in previous audits. Findings from the current audit can be characterized as follows:

- Project sponsors continue to submit late reports
- Project sponsors failed to submit some required reports
- Project sponsors failed to display the Air District logo on funded projects
- Project sponsors failed to notify the Air District of changes in project status (equipment sold).

Similarly, the County Program Manager Fund Audit Summary Report contained one (1) finding (project sponsor failed to display Air District logo on funded project) compared to two (2) in the previous audit. A discussion of the findings and the additional steps that Air District staff is taking to ensure that project sponsors comply with program requirements will be presented at the Committee meeting.

Future Audits

Based on the execution of this past audit, staff is also recommending that the contract with Gilbert Associates to conduct TFCA audits be extended for an additional two years. This recommendation is based on the efficiency and rigor of this past audit and Gilbert Associates' demonstrated ability to understand the requirements of the various components of the TFCA program and ascertain compliance with them. The recommended extension would cover Audit #14 of Air District programs and Regional Fund projects concluded during FYE 2012 and Audit #15 of Air District programs and Regional Fund projects concluded during FYE 2013 and County Program Manager projects concluded during FYE 2012 and 2013. The cost of this work is estimated at \$85,000 for Audit #14 and \$150,000 for Audit #15.

Report on Regional Fund Expenditures and Effectiveness

The report, provided in Attachment 3, summarizes as required in HSC Section 44241, TFCA Air District and Regional Fund expenditures on projects and programs that concluded during FYE 2012, and the effectiveness of these projects and programs. Key findings of the report include the following:

- TFCA funds were allocated to eligible projects and programs, consistent with the legislation that authorizes the TFCA program.
- The TFCA Regional Fund expenditures for projects and programs that concluded in FYE 2012 totaled \$9.74 million: \$7.40 million for projects implemented by other entities, \$1.59 million for Air District programs, and \$744,000 million in administrative and indirect costs.
- These projects and programs reduced criteria pollutant emissions over their lifetimes by an estimated 104.6 tons, including 38.88 tons of reactive organic gases (ROG), 48.03 tons of nitrogen oxides (NO_x), and 19.70 tons of particulate matter (PM₁₀). The lifetime reduction of carbon dioxide (CO₂), a greenhouse gas, was approximately 32,550 tons.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

None. As required by California Health and Safety Code Section 44242(a), the costs of TFCA audits are taken from the TFCA motor vehicle registration fee surcharges. Resources for Audit #13 were identified in the Air District's FYE 2012 budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Geraldina Grünbaum
Reviewed by: Karen Schkolnick

Attachments

Attachment 1: Audit Summary Report for the TFCA Regional Fund

Attachment 2: Audit Summary Report for the TFCA County Program Manager Fund

Attachment 3: FYE 2012 Report on TFCA Regional Fund Expenditures and Effectiveness

Attachment 1: Audit Summary Report for the TFCA Regional Fund

**BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

**TRANSPORTATION FUND FOR CLEAN AIR
PROGRAM REGIONAL FUND**

AUDIT SUMMARY REPORT

PROJECT PERIOD ENDED JUNE 30, 2011

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

TABLE OF CONTENTS

	<u>PAGE</u>
Introduction	1
Program Description	1
Audit Process	2
Sponsor Findings	4
Oversight Findings	6
Tables:	
1 – Sponsors with Late Reports	7
2 – Sponsors with Unfiled Reports	8
Appendix:	
A – Health and Safety Code Sections 44241 and 44242	9
B – Listing of Audited Projects	12

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

1. INTRODUCTION

The Bay Area Air Quality Management District (Air District) was created by the California legislature in 1955. The Air District's structure, operating procedures and authority are established by Division 26 of the California Health and Safety Code.

The Air District includes seven counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara and portions of two other counties, Southwestern Solano and Southern Sonoma. The Air District is governed by a twenty-two member Board of Directors that includes representatives from all of the above counties.

The Air District's jurisdiction is limited principally to policing non-vehicular sources of air pollution within the Bay Area, primarily industry pollution and burning. Any company wishing to build or modify a facility in the Bay area must first obtain a permit from the Air District to ensure that the facility complies with all applicable rules.

The Air District also acts as the program administrator for Transportation Fund for Clean Air (TFCA) funds and Mobile Source Incentive funds (MSIF) derived from Assembly Bill 434 and Assembly Bill 923 respectively. TFCA and MSIF funding comes from a \$4 and \$2 surcharge, respectively, on motor vehicles registered within the Air District. TFCA funding may only be used to fund eligible projects that reduce motor vehicle emissions and support the implementation of the transportation and mobile source control measures in the Clean Air Plan in place at time of award. All projects must fall within the categories listed in State Law (Health and Safety Code Section 44241).

The Health and Safety Code requires the Air District to pass-through no less than 40% of the TFCA revenues raised within a particular county, after audit and administrative costs, to that county's designated Program Manager. The remaining 60% is for Regional Fund grants and is being allocated to projects on a competitive basis. Projects are evaluated using the Air District's Board adopted evaluation and scoring criteria.

2. PROGRAM DESCRIPTION

Health and Safety Code Sections 44223 and 44225 authorize a surcharge on the motor vehicle registration fee (surcharge) to be used by the Air District and local governments specifically for programs to reduce air pollution from motor vehicles. The Department of Motor Vehicles collects the surcharge and allocates the amounts to the Air District. The Air District administers these funds through the TFCA Program. Under the TFCA Program, money is allocated to two funds: (1) 60% is placed in the Regional Fund and allocated to entities on a competitive basis by the Air District and (2) 40% is placed in the Program Managers Fund and allocated to designated agencies. Allowable projects under Health and Safety Code Section 44241 include the following:

- Ridesharing programs
- Purchase or lease of clean fuel school and transit buses
- Feeder or shuttle bus service to rail and ferry stations and airports
- Arterial traffic management

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

- Demonstrations in congestion pricing of highways, bridges and public transit
- Rail bus integration and regional transit information systems
- Low emission vehicle projects
- Bicycle facility improvement projects
- Physical improvements that support "Smart Growth" projects

State law requires that any agency receiving TFCA funding be subject to an audit, at least once every two years. Health and Safety Code Section 44242 provides the legal compliance guidelines for the Air District to follow in the event revenues are not spent appropriately or when projects do not result in emission reductions. Health and Safety Code Sections 44241 and 44242 are provided in Appendix A.

The Air District retained the firm of Gilbert Associates, Inc. to conduct financial and compliance audits of completed projects funded through the Regional Fund for the project period ended June 30, 2011. These audits were conducted during the months of December 2011 through July 2012.

A total of 51 individual Sponsors and 81 projects were audited, with \$21,642,012 total funds expended. A listing of the projects audited is provided in Appendix B.

3. AUDIT PROCESS

The audits were designed to address numerous financial and compliance objectives; however, the principal objectives of the audits were to (1) provide assurance that amounts reported in the Schedules of Expenditures are fairly stated, and (2) determine whether projects financed through the Air District's Regional Fund met funding agreement requirements. The audit procedures were specifically designed for TFCA financial and compliance requirements. The audit approach is described below:

Auditing Standards and Specific Procedures

The financial audits were performed in accordance with generally accepted auditing standards in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States for the period ended June 30, 2011.

Procedures performed included, but were not limited to:

- Gaining an understanding of the project sponsors' internal controls over financial reporting of the TFCA program through observation, inquiry, and supporting documentation.
- Tracing expenditures related to the TFCA program to the Sponsor's accounting records.
- Validating TFCA expenditures related to vendor disbursements, payroll, and administrative charges to supporting documentation.
- Conducting interviews with project sponsors to inquire about known, alleged or suspected fraud related to the program.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Compliance Auditing Procedures

The audits were performed in accordance with the requirements outlined in the Health and Safety Code, individual funding agreements and *Government Auditing Standards*. The principal focus of the compliance auditing procedures was to ensure TFCA expenditures were paid in accordance with the program's objectives (Health and Safety Code Sections 44241 and 44242). Detailed tests on select transactions were performed to verify compliance with the Health and Safety Code and individual funding agreements, but were not designed to provide assurance on overall project compliance.

Auditing procedures performed included, but were not limited to:

- Testing expenditures for allowable costs in accordance with Section 44241 of the Health and Safety Code.
- Verifying that the Sponsor used the TFCA funds for the reduction of emissions from motor vehicles.
- Determining that the Sponsor adopted appropriate resolutions authorizing the grant application or, where applicable, an authorizing letter of commitment.
- Verifying the expenditure of funds was within two years, unless a longer period was approved in writing by the Air District.
- Determining whether the Sponsor submitted to the Air District all required reports and that the reports contained all information required as specified on Attachment C of the funding agreement.
- Verifying the use of the Air District's approved logo or acknowledgment of the Air District in printed or electronic materials for public distribution.
- Determining if the Sponsor followed the indirect cost determination approach when allocating indirect costs to the project.
- Determining whether administrative costs were adequately supported and did not exceed 5% of the TFCA revenues.
- Determining whether other specific terms of the funding agreement were adhered to, such as additional reporting requirements.

We issued unqualified opinions on 49 of the 51 audit reports. Limitations on our audit procedures caused us to disclaim our opinion on the reports for Cooper Crane & Rigging and North Bay Construction, Inc. These limitations were the result of Cooper Crane & Rigging ceasing operations prior to audit fieldwork, and North Bay Construction, Inc., being acquired by another construction company prior to audit fieldwork.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

4. SPONSOR FINDINGS

A summary of Sponsor audit findings is provided below.

Finding 2011-1: *Late Filing of Reports*

According to the funding agreement between the Air District and the Sponsors, Sponsors were required to submit to the Air District quarterly reports, a final report, and other reports specified in the Sponsor's funding agreements.

During the audit, we noted that the projects listed in Table 1 had one or more late reports. 21 Sponsors out of 51 (41.17%) and 27 projects out of the 81 audited (33.33%) had one or more late reports. The number of quarterly reports, final reports, and other reports submitted late are noted below:

	<u>Late Reports</u>	<u>Number of Sponsors</u>	<u>Number of Projects</u>
Quarterly reports	62	15	17
Semiannual reports	14	8	10
Final reports	6	3	6
Total late reports	<u>82</u>		

Air District's Response to Finding 2011-1

The District acknowledges this finding, and continues to take significant steps to assist project sponsors with submitting reports on time. These efforts include further strengthening the Administrative Operating Procedure (AOP) for Regional Fund Administration to include sending reminders to all project sponsors three weeks prior to report due dates and following-up with telephone calls and/or emails beginning one week prior to the due date if a report is still not received. As outlined in the AOP, if a report is more than three weeks late, the project sponsor is sent a Delinquent Notice, which includes language warning that failure to submit a report will delay payment, may result in termination of the grant, and may render the sponsor ineligible from future grants. In addition, under the current call for TFCA grant applications, the District has required that sponsors that have received an audit finding in the past five years attend a District-sponsored application and grants administration workshop in order to be eligible for consideration of future funding. Lastly, the Air District is currently exploring additional options for encouraging the submittal of reports by evaluating the administrative best practices employed by other agencies.

Finding 2011-2: *Unfiled Reports*

According to the funding agreement between the Air District and the Sponsors, Sponsors were required to submit to the Air District quarterly or semiannual reports, a final report, and other reports specified in the Sponsor's funding agreements.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

During the audit, we noted that the projects listed in Table 2 had one or more unfiled reports. 18 Sponsors out of 51 (35.29%) and 19 projects out of the 81 audited (23.46%) had one or more unfiled reports. The number of unfiled reports is noted below:

	<u>Unfiled Reports</u>	<u>Number of Sponsors</u>	<u>Number of Projects</u>
Quarterly reports	25	13	14
Semiannual reports	6	5	5

Air District's Response to Finding 2011-2

The District acknowledges this finding, and, as with late reports, has taken significant steps to reduce the likelihood of sponsors not filing reports. The efforts the Air District has taken to strengthen its AOP for Regional Fund Administration are outlined in the response to Finding 2011-1. Likewise, the requirement that sponsors with audit findings attend Air District-sponsored grant administration workshops is an additional step the District has taken to ensure sponsors' compliance with all reporting requirements.

Finding 2011-3: Enforcement of Logo and Publicity Compliance

According to the funding agreement between the Air District and the Sponsors, Sponsors were to acknowledge the Air District as a project funding source and use or display the Air District-approved logo so that it is visible to the public on any motor vehicles leased or purchased with TFCA funds, on any other property purchased with TFCA funds, on any printed or electronic material associated with the project that is distributed to the public, and in any project-related media events, articles, news releases, or other publicity materials.

During the audit, we noted that 2 Sponsors out of 51 (3.92%) and 2 projects out of the 81 audited (2.47%) had not acknowledged the Air District on promotional materials or shuttle schedules related to the project, as listed below.

<u>Project Number</u>	<u>Project Sponsor</u>	<u>Project Description</u>
07BFP12	City of Redwood City	Middlefield Road Bike Lane Striping Project
06R92	University of California, San Francisco	UCSF Mission Bay BART Powell Street Shuttle

Air District's Response to Finding 2011-3

The District acknowledges this finding and continues to emphasize that TFCA funding be properly credited as a funding source. This requirement is covered in the Air District's grant administration workshop and is included in each project's contract. In addition, sponsors are required to report on the use of the Air District logo and acknowledgement of the Air District as a source of funding in each Semi-Annual Report and in the Final Report.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Finding 2011-4: *Changes in Operational Status*

According to the funding agreement between the Air District and the Sponsors, Sponsors were to notify the Air District in writing of any change in the operational status of equipment or services purchased or funded under the agreement within thirty days of the occurrence of such a change in operational status. During the audit, we noted two instances in which vehicles retrofitted with TFCA funds had been sold prior to the completion of the projects' useful lives, but the District had not been notified. After being notified, the District requested reimbursement for a proportionate amount of TFCA funds expended for the vehicle retrofits. The two projects that were noncompliant with the requirement to notify the District of changes in operational status are listed below.

Project Number	Project Sponsor	Project Description
08R28	City of Santa Clara	Retrofit Five Heavy-Duty Vehicles
08R56	Cooper Crane & Rigging	Repower 3 Heavy-Duty Vehicles

Air District's Response to Finding 2011-4

While the District concurs with the finding that the City of Santa Clara failed to notify the District as required, all owed funds have since been returned to the District by the City of Santa Clara and this Finding has been corrected. The District is currently pursuing legal action against Cooper Crane & Rigging.

5. OVERSIGHT FINDINGS

No oversight findings noted as of and for the project period ending June 30, 2011.

TABLE 1
SPONSORS WITH LATE REPORTS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

**TABLE 1 - SPONSORS WITH LATE REPORTS
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011**

Project Number	Project Sponsor	Project Description
06R34	Amador Valley Industries, LLC	Purchase Two (2) Compressed Natural Gas Solid Waste Collection Vehicles
09R10	Associated Students, San Jose State University	Ridesharing and Trip Reduction
05R62	City of Berkeley	Transportation Alternatives Marketing and Outreach Program
06R74	City of Berkeley	West Berkeley Shuttle Service
07R12	City of Berkeley	West Berkeley Shuttle Service
02R51	City of East Palo Alto	Bay Road Traffic Calming & Streetscape Improvements
07BFP16	City of Half Moon Bay	Highway 1 Trail Project Phase 3
04R27	City of Suisun City	Class 1 Bicycle Path - Central County Bikeway (Phase 4)
04R48	City of Sunnyvale	Pedestrian Improvements - Frances Street Corridor
07BFP18	City of Union City	Alvarado-Niles Road - Union City Blvd. Gap Closure Connector
08R56	Cooper Crane & Rigging	Repower Three (3) Heavy-Duty Vehicles
07R34	Foster Farms Dairy	Retrofit Seventeen (17) Heavy-Duty Trucks - Level 3 Devices
08R79	Gurinder Pannu	Retrofit & Repower One (1) Heavy-Duty Vehicle
08R39	MAG Trucking	Retrofit One (1) Heavy-Duty Truck Diesel - Level 3 Device
07BFP25	Marin County	Alameda Del Prado Class II Project
08BFP06	Marin County	Build-Out of Marin County Bicycle Network
06R59	Mercury Tours	Retrofit Ten (10) Diesel Buses
06R82	Metropolitan Transportation Commission	Regional Rideshare Program
07R18	Metropolitan Transportation Commission	Regional Rideshare Program
08R12	Metropolitan Transportation Commission	Regional Rideshare Program
06R37	Pleasanton Garbage Service, Inc.	Purchase Four (4) Compressed Natural Gas Solid Waste Collection Vehicles
04R22	Port of Oakland	Heavy-Duty Vehicle Replacement - Five (5) Compressed Natural Gas Transit Buses
06R63	Royal Coach Lines	Retrofit Sixteen (16) Diesel Buses
03R51	Santa Clara Valley Transportation Authority	Bicycle Racks - Santa Clara County
08BFP02	Santa Clara Valley Transportation Authority	E-Locker Retrofit Program
06R65	Sheedy Drayage Company	Retrofit Six (6) Heavy-Duty Diesel Trucks
08R62	West County Transportation Agency	Repower Two (2) School Buses

TABLE 2
SPONSORS WITH UNFILED REPORTS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

**TABLE 2 - SPONSORS WITH UNFILED REPORTS
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011**

Project Number	Project Sponsor	Project Description
06R34	Amador Valley Industries, LLC	Purchase Two (2) Compressed Natural Gas Solid Waste Collection Vehicles
02R51	City of East Palo Alto	Bay Road Traffic Calming & Streetscape Improvements
07BFP16	City of Half Moon Bay	Highway 1 Trail Project Phase 3
07BFP12	City of Redwood City	Middlefield Road Bike Lane Striping Project
08R19	City of San Francisco	Purchase 98 Gasoline-Electric Hybrid Light Duty Vehicles
08R67	City of Santa Rosa	Purchase One (1) Hybrid Gasoline-Electric Bus
04R27	City of Suisun City	Class 1 Bicycle Path - Central County Bikeway (Phase 4)
03R18	City of Sunnyvale	In-Pavement Crosswalk Warning Lights
04R48	City of Sunnyvale	Pedestrian Improvements - Frances Street Corridor
08R54	Delta Steel Erectors	Retrofit One (1) Heavy-Duty Vehicle
08R36	Hansen Transport, Inc.	Retrofit Two (2) Heavy-Duty Vehicles
08R41	North Bay Construction	Retrofit Five (5) Heavy-Duty Trucks - Level 3 Device
04R22	Port of Oakland	Heavy-Duty Vehicle Replacement - Five (5) Compressed Natural Gas Transit Buses
07BFP11	Presidio Trust	Presidio Promenade & Park Boulevard Trail
06R63	Royal Coach Lines	Retrofit Sixteen (16) Diesel Buses
07R42	San Francisco International Airport	Retrofit Twenty-Four (24) Diesel Buses - Level 3 Devices
03R51	Santa Clara Valley Transportation Authority	Bicycle Racks - Santa Clara County
06R65	Sheedy Drayage Company	Retrofit Six (6) Heavy-Duty Diesel Trucks
08R63	Specialty Solid Waste & Recycling	Purchase Four (4) Heavy-Duty Compressed Natural Gas Vehicles

APPENDIX A
HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242 FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

44241

- (a) Fee revenues generated under this chapter in the bay district shall be subvended to the bay district by the Department of Motor Vehicles after deducting its administrative costs pursuant to Section 44229.
- (b) Fee revenues generated under this chapter shall be allocated by the bay district to implement the following mobile source and transportation control projects and programs that are included in the plan adopted pursuant to Sections 40233, 40717, and 40919:
 - (1) The implementation of ridesharing programs.
 - (2) The purchase or lease of clean fuel buses for school districts and transit operators.
 - (3) The provision of local feeder bus or shuttle service to rail and ferry stations and to airports.
 - (4) Implementation and maintenance of local arterial traffic management, including, but not limited to, signal timing, transit signal preemption, bus stop relocation and "smart streets."
 - (5) Implementation of rail-bus integration and regional transit information systems.
 - (6) Implementation of demonstration projects in telecommuting and in congestion pricing of highways, bridges, and public transit. No funds expended pursuant to this paragraph for telecommuting projects shall be used for the purchase of personal computing equipment for an individual's home use.
 - (7) Implementation of vehicle-based projects to reduce mobile source emissions, including, but not limited to, engine repowers, engine retrofits, fleet modernization, alternative fuels, and advanced technology demonstrations.
 - (8) Implementation of a smoking vehicles program.
 - (9) Implementation of an automobile buy-back scrappage program operated by a governmental agency.
 - (10) Implementation of bicycle facility improvement projects that are included in an adopted countywide bicycle plan or congestion management program.
 - (11) The design and construction by local public agencies of physical improvements that support development projects that achieve motor vehicle emission reductions. The projects and the physical improvements shall be identified in an approved area-specific plan, redevelopment plan, general plan, or other similar plan.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242 FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

- (c) (1) Fee revenue generated under this chapter shall be allocated by the bay district for projects and programs specified in subdivision (b) to cities, counties, the Metropolitan Transportation Commission, transit districts, or any other public agency responsible for implementing one or more of the specified projects or programs. Fee revenue generated under this chapter may also be allocated by the bay district for projects and programs specified in paragraph (7) of subdivision (b) to entities that include, but are not limited to, public agencies, consistent with applicable policies adopted by the governing board of the bay district. Those policies shall include, but are not limited to, requirements for cost-sharing for projects subject to the policies. Fee revenues shall not be used for any planning activities that are not directly related to the implementation of a specific project or program.
- (2) The bay district shall adopt cost-effectiveness criteria for fee revenue generated under this chapter that projects and programs are required to meet. The cost-effectiveness criteria shall maximize emissions reductions and public health benefits.
- (d) Not less than 40 percent of fee revenues shall be allocated to the entity or entities designated pursuant to subdivision (e) for projects and programs in each county within the bay district based upon the county's proportionate share of fee-paid vehicle registration.
- (e) In each county, one or more entities may be designated as the overall program manager for the county by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county. The resolution shall specify the terms and conditions for the expenditure of funds. The entities so designated shall be allocated the funds pursuant to subdivision (d) in accordance with the terms and conditions of the resolution.
- (f) Any county, or entity designated pursuant to subdivision (e), that receives funds pursuant to this section, at least once a year, shall hold one or more public meetings for the purpose of adopting criteria for expenditure of the funds and to review the expenditure of revenues received pursuant to this section by any designated entity. If any county or entity designated pursuant to subdivision (e) that receives funds pursuant to this section has not allocated all of those funds within six months of the date of the formal approval of its expenditure plan by the bay district, the bay district shall allocate the unallocated funds in accordance with subdivision (c).

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

AUDIT SUMMARY REPORT HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242 FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

44242

- (a) Any agency which receives funds pursuant to Section 44241 shall, at least once every two years, undertake an audit of each program or project funded. The audit shall be conducted by an independent auditor selected by the bay district in accordance with Division 2 (commencing with Section 1100) of the Public Contract Code. The district shall deduct any audit costs which will be incurred pursuant to this section prior to distributing fee revenues to cities, counties, or other agencies pursuant to Section 44241.
- (b) Upon completion of an audit conducted pursuant to subdivision (a), the bay district shall do both of the following:
 - (1) Make the audit available to the public and to the affected agency upon request.
 - (2) Review the audit to determine if the fee revenues received by the agency were spent for the reduction of air pollution from motor vehicles pursuant to the plan prepared pursuant to Sections 40233 and 40717.
- (c) If, after reviewing the audit, the bay district determines that the revenues from the fees may have been expended in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to that plan, the district shall do all of the following:
 - (1) Notify the agency of its determination.
 - (2) Within 45 days of the notification pursuant to paragraph (1), hold a public hearing at which the agency may present information relating to expenditure of the revenues from the fees.
 - (3) After the public hearing, if the district determines that the agency has expended the revenues from the fees in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to the plan prepared pursuant to Sections 40233 and 40717, the district shall withhold these revenues from the agency in an amount equal to the amount which was inappropriately expended. Any revenues withheld pursuant to this paragraph shall be redistributed to the other cities within the county, or to the county, to the extent the district determines that they have complied with the requirements of this chapter.
- (d) Any agency which receives funds pursuant to Section 44241 shall encumber and expend the funds within two years of receiving the funds, unless an application for funds pursuant to this chapter states that the project will take a longer period of time to implement and is approved by the district or the agency designated pursuant to subdivision (e) of Section 44241. In any other case, the district or agency may extend the time beyond two years, if the recipient of the funds applies for that extension and the district or agency, as the case may be, finds that significant progress has been made on the project for which the funds were granted.

APPENDIX B
LISTING OF AUDITED PROJECTS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

APPENDIX B FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Project Number	Project Sponsor	Project Description	Project Expenditures
03R54	Alameda County Congestion Management Agency	Arterial Management - Increase Transit Priority International Blvd./East 14th Street	\$ 500,000
06R34	Amador Valley Industries, LLC	Purchase Two (2) Compressed Natural Gas Solid Waste Collection Vehicles	100,000
08R06	Associated Students, San Jose State University	Transportation Demand Management Program	100,000
09R10	Associated Students, San Jose State University	Ridesharing and Trip Reduction	105,123
08R00	Bay Area Air Quality Management District	Administration Costs	1,238,229
08R01	Bay Area Air Quality Management District	Smoking Vehicle Program	434,846
08R02	Bay Area Air Quality Management District	Vehicle Buy Back Program	193,326
08R03	Bay Area Air Quality Management District	Spare the Air	305,672
09R00	Bay Area Air Quality Management District	Administration Costs	1,251,561
09R01	Bay Area Air Quality Management District	Smoking Vehicle Program	902,235
09R03	Bay Area Air Quality Management District	Spare the Air	1,291,963
10R00	Bay Area Air Quality Management District	Administration Costs	1,126,045
10R01	Bay Area Air Quality Management District	Smoking Vehicle Program	693,730
10R03	Bay Area Air Quality Management District	Spare the Air	788,229
08R24	California Shingle & Shake	Retrofit Seven (7) Heavy Duty Vehicles	120,447
08R25	Challenge Dairy Products, Inc.	Retrofit Thirteen(13) Heavy Duty Vehicles	157,197
08R88	Challenge Dairy Products, Inc.	Retrofit Two (2) Heavy Duty Vehicles	16,769
05R62	City of Berkeley	Transportation Alternatives Marketing and Outreach Program	44,216
06R74	City of Berkeley	West Berkeley Shuttle Service	20,600
07R12	City of Berkeley	West Berkeley Shuttle Service	25,000
08BFP01	City of Daly City	King Drive Bicycle Lanes	15,327
02R51	City of East Palo Alto	Bay Road Traffic Calming & Streetscape Improvements	248,063
07BFP16	City of Half Moon Bay	Highway 1 Trail Project Phase 3	34,785
06R75	City of Redwood City	Redwood City Community Shuttle Service Pilot Program	7,408
07BFP12	City of Redwood City	Middlefield Road Bike Lane Striping Project	10,500
08R07	City of Redwood City	Caltrain Shuttle Service	13,786
09R12	City of Redwood City	Commuter Shuttle	14,121
08R19	City of San Francisco	Purchase 98 Gasoline-Electric Hybrid Light Duty Vehicles	128,333
08R28	City of Santa Clara	Retrofit Five (5) Heavy-Duty Vehicles	35,598
08R67	City of Santa Rosa	Purchase One (1) Hybrid Gasoline-Electric Bus	166,000
04R27	City of Suisun City	Class 1 Bicycle Path - Central County Bikeway (Phase 4)	130,000

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

APPENDIX B FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Project Number	Project Sponsor	Project Description	Project Expenditures
03R18	City of Sunnyvale	In-Pavement Crosswalk Warning Lights	35,255
04R48	City of Sunnyvale	Pedestrian Improvements - Frances Street Corridor	429,000
07BFP18	City of Union City	Alvarado-Niles Road - Union City Blvd. Gap Closure Connector	23,495
08R56	Cooper Crane & Rigging	Repower Three (3) Heavy-Duty Vehicles	176,897
08R29	County of Contra Costa	Retrofit Four (4) Heavy-Duty Vehicles	70,000
08R85	County of Contra Costa	Retrofit Four (4) Heavy-Duty Vehicles	10,246
08R54	Delta Steel Erectors	Retrofit One (1) Heavy-Duty Vehicle	14,910
08R81	Farwest Sanitation and Storage	Retrofit Ten (10) Heavy-Duty Vehicles	155,828
07R34	Foster Farms Dairy	Retrofit Seventeen (17) Heavy-Duty Trucks - Level 3 Devices	309,349
08R23	Friedman's Home Improvement	Retrofit Eleven (11) Heavy-Duty Vehicles	140,115
08R31	Gan-Trans, Ltd.	Retrofit Five (5) Heavy-Duty Vehicles	101,680
08R79	Gurinder Pannu	Retrofit & Repower One (1) Heavy-Duty Vehicle	69,620
08R36	Hansen Transport, Inc.	Retrofit Two (2) Heavy-Duty Vehicles	31,955
09R09	Livermore Amador Valley Transit Authority	Route 1A/B BART Shuttle	46,624
09R19	Livermore Sanitation	Three (3) Compressed Natural Gas Refuse Trucks	73,066
08R39	MAG Trucking	Retrofit One (1) Heavy-Duty Truck Diesel - Level 3 Device	23,495
07BFP25	Marin County	Alameda Del Prado Class II Project	42,500
08BFP06	Marin County	Build-Out of Marin County Bicycle Network	163,480
06R59	Mercury Tours	Retrofit Ten (10) Diesel Buses	157,142
06R82	Metropolitan Transportation Commission	Regional Rideshare Program	882,225
07R18	Metropolitan Transportation Commission	Regional Rideshare Program	920,009
08R12	Metropolitan Transportation Commission	Regional Rideshare Program	1,000,000
08R41	North Bay Construction	Retrofit Five (5) Heavy-Duty Trucks - Level 3 Device	32,494
08R42	Pacific Rim Recycling	Retrofit Four (4) Heavy-Duty Diesel Vehicles - Level 3 Device	38,885
07R19	Peninsula Corridor Joint Powers Board	Caltrain Weekday Shuttle Bus Service	1,034,555
08R16	Peninsula Corridor Joint Powers Board	Caltrain Weekday Shuttle Service	1,000,000
06R37	Pleasanton Garbage Service, Inc.	Purchase Four (4) Compressed Natural Gas Solid Waste Collection Vehicles	200,000
04R22	Port of Oakland	Heavy-Duty Vehicle Replacement - Five (5) Compressed Natural Gas Transit Buses	290,000
08R45	Pozas Brothers Trucking	Retrofit Eleven (11) Heavy-Duty Vehicles	84,474

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM REGIONAL FUND

APPENDIX B FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Project Number	Project Sponsor	Project Description	Project Expenditures
07BFP11	Presidio Trust	Presidio Promenade & Park Boulevard Trail	82,110
08R49	Rich Ladeira Trucking, Inc.	Repower & Retrofit One (1) Heavy-Duty Vehicle	62,224
06R63	Royal Coach Lines	Retrofit Sixteen (16) Diesel Buses	217,196
07R42	San Francisco International Airport	Retrofit Twenty-Four (24) Diesel Buses - Level 3 Devices	425,895
06R18	San Francisco Municipal Transportation Authority	North Point Street Bicycle Lanes between the Embarcadero and Van Ness	88,378
07R69	San Francisco Municipal Transportation Authority	7th Avenue Traffic Calming	34,270
07R21	San Joaquin Regional Rail Commission	LAVTA ACE-BART Shuttle Bus Service - Pleasanton ACE and Dublin/Pleasanton BART Stations	49,990
07R22	San Joaquin Regional Rail Commission	LAVTA ACE-BART Shuttle Bus Service - Pleasanton ACE to Stoneridge Business Park	44,000
08R13	San Joaquin Regional Rail Commission	LAVTA ACE-BART Shuttle Service - Between Pleasanton ACE and Dublin/Pleasanton BART Stations (Route 54)	48,016
08R14	San Joaquin Regional Rail Commission	LAVTA ACE Shuttle Bus Service - Pleasanton ACE to Stoneridge Business Park (Route 53)	44,000
09R06	San Joaquin Regional Rail Commission	ACE Shuttle - Route 54	38,022
09R17	Santa Clara Valley Industries, LLC	Eleven (11) Compressed Natural Gas Refuse Trucks	275,000
03R51	Santa Clara Valley Transportation Authority	Bicycle Racks - Santa Clara County	39,155
08BFP02	Santa Clara Valley Transportation Authority	E-Locker Retrofit Program	22,100
08R15	Santa Clara Valley Transportation Authority	ACE Shuttle Bus Program	960,000
09R05	Santa Clara Valley Transportation Authority	ACE Shuttle Bus Program	945,649
06R65	Sheedy Drayage Company	Retrofit Six (6) Heavy-Duty Diesel Trucks	42,793
07R62	South San Francisco Scavenger Company	Purchase One (1) Heavy-Duty Compressed Natural Gas Truck	69,750
08R63	Specialty Solid Waste & Recycling	Purchase Four (4) Heavy-Duty Compressed Natural Gas Vehicles	269,002
06R92	University of California, San Francisco	UCSF Mission Bay BART Powell Street Shuttle	44,404
08R62	West County Transportation Agency	Repower Two (2) School Buses	<u>63,650</u>
Total Funds Expended			<u>\$ 21,642,012</u>
Total Sponsors Audited			51
Total Projects Audited			81

**Attachment 2: Audit Summary Report for the TFCA County
Program Manager Fund**

**BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

**TRANSPORTATION FUND FOR CLEAN AIR
PROGRAM MANAGER FUND**

AUDIT SUMMARY REPORT

PROJECT PERIOD ENDED JUNE 30, 2011

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT TABLE OF CONTENTS

	<u>PAGE</u>
Introduction	1
Program Description	1
Audit Process	2
Program Manager Findings	3
Oversight Findings	4
Appendix:	
A – Health and Safety Code Sections 44241 and 44242	5
B – Listing of Audited Projects by Program Manager	8

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

1. INTRODUCTION

The Bay Area Air Quality Management District (Air District), created by the California legislature in 1955, is the state's first regional agency dealing with air pollution. The Air District regulates stationary sources of air pollution within the nine San Francisco Bay Area counties in California. The Air District's jurisdiction includes Alameda County, Contra Costa County, Marin County, Napa County, City/County of San Francisco, San Mateo County, Santa Clara County, southern Sonoma County, and south-western Solano County. The primary mission of the Air District is to achieve ambient air quality standards designed to protect the public's health and the environment. The Air District is governed by a twenty-two member Board of Directors who has the authority to develop and enforce regulations for the control of air pollution within its jurisdiction.

2. PROGRAM DESCRIPTION

Health and Safety Code Sections 44223 and 44225 authorize a surcharge on the motor vehicle registration fee (surcharge) to be used by the Air District and local governments to fund projects that implement transportation control measures in accordance with the 1988 California Clean Air Act and the 2010 Clean Air Plan. These measures are designed specifically to reduce air pollution from motor vehicles. The Department of Motor Vehicles collects the surcharge and allocates the amounts to the Air District.

The Air District administers these funds through the Transportation Fund for Clean Air (TFCA) Program. Under the TFCA Program, money is allocated to two funds: (1) 60% is placed in the Regional Fund and allocated to entities on a competitive basis by the Air District and (2) 40% is placed in the Program Managers Fund and allocated to designated agencies, known as program managers. Allowable projects under Health and Safety Code Section 44241 include the following:

- Ridesharing programs
- Purchase or lease of clean fuel school and transit buses
- Feeder or shuttle bus service to rail and ferry stations and airports
- Arterial traffic management
- Demonstrations in congestion pricing of highways, bridges and public transit
- Rail bus integration and regional transit information systems
- Low emission vehicle projects
- Bicycle facility improvement projects
- Physical improvements that support "Smart Growth" projects

State law requires that any agency receiving TFCA funding be subject to an audit, at least once every two years. Health and Safety Code Section 44242 provides the legal compliance guidelines for the Air District to follow in the event revenues are not spent appropriately or when projects do not result in emission reductions. Health and Safety Code Sections 44241 and 44242 are provided in Appendix A.

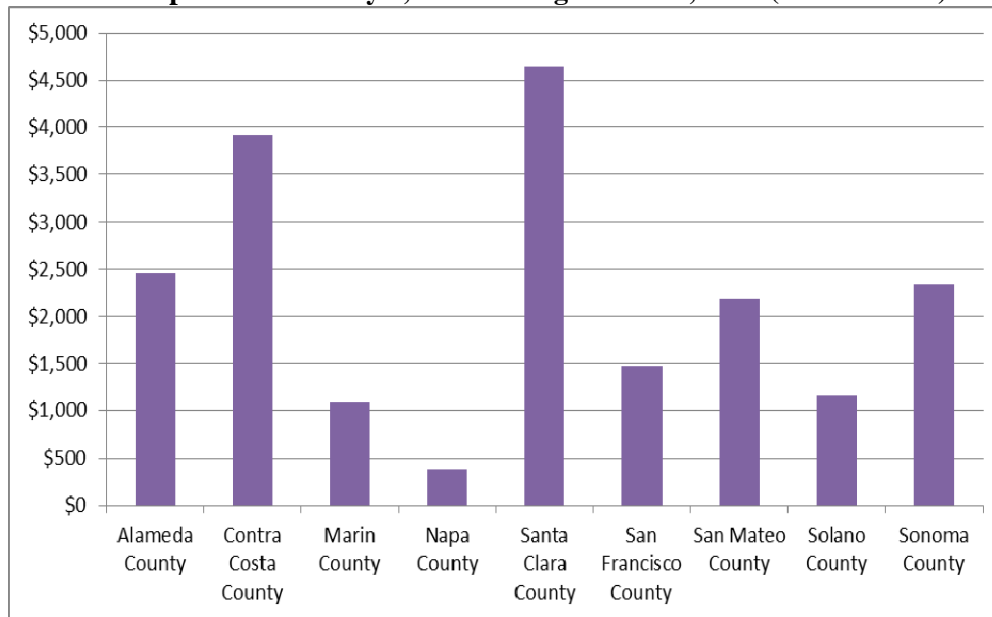
BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

The Air District retained the firm of Gilbert Associates, Inc. to conduct financial and compliance audits of completed projects funded through the Program Manager Fund for the project period ended June 30, 2011. The graph below reports the amount of TFCA Funds allocated to each of the individual Program Managers for projects that closed during the period from July 1, 2008 through June 30, 2011. These audits were performed during the period of November 2011 through April 2012. A list of audited projects is provided in Attachment B.

Total Funds Expended by Program Manager for Specified Projects Conducted for the period from July 1, 2008 through June 30, 2011 (in thousands)



3. AUDIT PROCESS

The audits were designed to address numerous financial and compliance objectives; however, the principal objectives of the audits were to (1) provide assurance that amounts reported in the Schedules of Expenditures are fairly stated, and (2) determine whether projects financed through the Air District's Program Manager Fund met funding agreement requirements. The audit procedures were specifically designed for TFCA financial and compliance requirements. The audit approach is described below:

Auditing Standards and Specific Procedures

The audits were performed in accordance with generally accepted auditing standards in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. The expenditures under audit were TFCA expenditures, incurred by the Program Managers in the Air District's jurisdiction, related to projects that had been reported closed between July 1, 2008, and June 30, 2011.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Compliance Auditing Procedures

The audits were performed in accordance with the requirements outlined in the Health and Safety Code, individual funding agreements and *Government Auditing Standards*. The principal focus of the compliance auditing procedures was to ensure TFCA expenditures were paid in accordance with the program's objectives (Health and Safety Code Sections 44241). In the individual Program Manager Fund audits, a report entitled "Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Schedule of Expenditures of Projects Performed in Accordance with *Government Auditing Standards* and Requirements of Section 44241 of the California Health and Safety Code" was issued for each Program Manager to provide specific assurance that the Program Manager did or did not comply with the Health and Safety Code. Each of the nine program managers audited received an unqualified opinion.

4. PROGRAM MANAGER FINDINGS

A summary of Program Manager Findings is provided below.

ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

According to the funding agreement between the Air District and the Alameda County Congestion Management Agency (Agency), the Agency agrees to require the use of the Air District's approved logo by any recipients of TFCA funds from the Agency, and to demonstrate to the Air District through photographs or other evidence that the logos are used and displayed as required. The funding agreement also specifies that the Agency is required to make available to the auditors, for three years following completion of the projects, all records relating to project performance and expenses incurred in implementing the project.

During testing of the Agency's compliance with this requirement, we noted the Agency was not able to provide documentation showing that the Air District's logo was used on signs posted at the site of project construction. As the audit was performed within three years of the completion of the project, photographic evidence of the logo use should have been maintained by the Agency.

Management Response:

The project sponsor has indicated that a temporary construction sign crediting the project's multiple funding sources was in place for this project, though the Alameda County Transportation Commission (entity created through the merger of the Alameda County Congestion Management Agency and the Alameda County Transportation Improvement Authority) was not able to provide photographic or other documentation regarding the temporary construction sign for the subject project. The Agency will modify the structure of agreement documents for the program to improve the collection of photographs or other evidence that the Air District logos are used and displayed per the program requirements.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Air District's Response:

The District concurs with the steps the Agency has undertaken to ensure the appropriate collection of photographs or other evidence that the logos are used and displayed as required. In addition, this requirement is incorporated in the Funding Agreement between the District and each of the County Program Managers.

5. OVERSIGHT FINDINGS

No oversight findings noted as of and for the project period ended June 30, 2011.

APPENDIX A
HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242 FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

44241

(a) Fee revenues generated under this chapter in the bay district shall be subvned to the bay district by the Department of Motor Vehicles after deducting its administrative costs pursuant to Section 44229.

(b) Fee revenues generated under this chapter shall be allocated by the bay district to implement the following mobile source and transportation control projects and programs that are included in the plan adopted pursuant to Sections 40233, 40717, and 40919:

- (1) The implementation of ridesharing programs.
- (2) The purchase or lease of clean fuel buses for school districts and transit operators.
- (3) The provision of local feeder bus or shuttle service to rail and ferry stations and to airports.
- (4) Implementation and maintenance of local arterial traffic management, including, but not limited to, signal timing, transit signal preemption, bus stop relocation and "smart streets."
- (5) Implementation of rail-bus integration and regional transit information systems.
- (6) Implementation of demonstration projects in telecommuting and in congestion pricing of highways, bridges, and public transit. No funds expended pursuant to this paragraph for telecommuting projects shall be used for the purchase of personal computing equipment for an individual's home use.
- (7) Implementation of vehicle-based projects to reduce mobile source emissions, including, but not limited to, engine repowers, engine retrofits, fleet modernization, alternative fuels, and advanced technology demonstrations.
- (8) Implementation of a smoking vehicles program.
- (9) Implementation of an automobile buy-back scrappage program operated by a governmental agency.
- (10) Implementation of bicycle facility improvement projects that are included in an adopted countywide bicycle plan or congestion management program.
- (11) The design and construction by local public agencies of physical improvements that support development projects that achieve motor vehicle emission reductions. The projects and the physical improvements shall be identified in an approved area-specific plan, redevelopment plan, general plan, or other similar plan.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242 FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

(c) (1) Fee revenue generated under this chapter shall be allocated by the bay district for projects and programs specified in subdivision (b) to cities, counties, the Metropolitan Transportation Commission, transit districts, or any other public agency responsible for implementing one or more of the specified projects or programs. Fee revenue generated under this chapter may also be allocated by the bay district for projects and programs specified in paragraph (7) of subdivision (b) to entities that include, but are not limited to, public agencies, consistent with applicable policies adopted by the governing board of the bay district. Those policies shall include, but are not limited to, requirements for cost-sharing for projects subject to the policies. Fee revenues shall not be used for any planning activities that are not directly related to the implementation of a specific project or program.

(2) The bay district shall adopt cost-effectiveness criteria for fee revenue generated under this chapter that projects and programs are required to meet. The cost-effectiveness criteria shall maximize emissions reductions and public health benefits.

(d) Not less than 40 percent of fee revenues shall be allocated to the entity or entities designated pursuant to subdivision (e) for projects and programs in each county within the bay district based upon the county's proportionate share of fee-paid vehicle registration.

(e) In each county, one or more entities may be designated as the overall program manager for the county by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county. The resolution shall specify the terms and conditions for the expenditure of funds. The entities so designated shall be allocated the funds pursuant to subdivision (d) in accordance with the terms and conditions of the resolution.

(f) Any county, or entity designated pursuant to subdivision (e), that receives funds pursuant to this section, at least once a year, shall hold one or more public meetings for the purpose of adopting criteria for expenditure of the funds and to review the expenditure of revenues received pursuant to this section by any designated entity. If any county or entity designated pursuant to subdivision (e) that receives funds pursuant to this section has not allocated all of those funds within six months of the date of the formal approval of its expenditure plan by the bay district, the bay district shall allocate the unallocated funds in accordance with subdivision (c).

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND

AUDIT SUMMARY REPORT HEALTH AND SAFETY CODE SECTIONS 44241 AND 44242 FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

44242

(a) Any agency which receives funds pursuant to Section 44241 shall, at least once every two years, undertake an audit of each program or project funded. The audit shall be conducted by an independent auditor selected by the bay district in accordance with Division 2 (commencing with Section 1100) of the Public Contract Code. The district shall deduct any audit costs which will be incurred pursuant to this section prior to distributing fee revenues to cities, counties, or other agencies pursuant to Section 44241.

(b) Upon completion of an audit conducted pursuant to subdivision (a), the bay district shall do both of the following:

- (1) Make the audit available to the public and to the affected agency upon request.
- (2) Review the audit to determine if the fee revenues received by the agency were spent for the reduction of air pollution from motor vehicles pursuant to the plan prepared pursuant to Sections 40233 and 40717.

(c) If, after reviewing the audit, the bay district determines that the revenues from the fees may have been expended in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to that plan, the district shall do all of the following:

- (1) Notify the agency of its determination.
- (2) Within 45 days of the notification pursuant to paragraph (1), hold a public hearing at which the agency may present information relating to expenditure of the revenues from the fees.
- (3) After the public hearing, if the district determines that the agency has expended the revenues from the fees in a manner which is contrary to this chapter or which will not result in the reduction of air pollution from motor vehicles pursuant to the plan prepared pursuant to Sections 40233 and 40717, the district shall withhold these revenues from the agency in an amount equal to the amount which was inappropriately expended. Any revenues withheld pursuant to this paragraph shall be redistributed to the other cities within the county, or to the county, to the extent the district determines that they have complied with the requirements of this chapter.

(d) Any agency which receives funds pursuant to Section 44241 shall encumber and expend the funds within two years of receiving the funds, unless an application for funds pursuant to this chapter states that the project will take a longer period of time to implement and is approved by the district or the agency designated pursuant to subdivision (e) of Section 44241. In any other case, the district or agency may extend the time beyond two years, if the recipient of the funds applies for that extension and the district or agency, as the case may be, finds that significant progress has been made on the project for which the funds were granted.

APPENDIX B

LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Alameda County Congestion Management Agency:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Alameda County Congestion Management Agency		
Program Administration	08ALA00	\$ 92,997
Program Administration	09ALA00	90,820
E. 14th Steet/International Boulevard		
Signal Timing and Arterial Management	05ALA04	395,000
Signal Timing: Constitution Way/Lincoln Ave	07ALA01	99,985
Guaranteed Ride Home Program	07ALA07	270,000
Bay Area Rapid Transit		
Electronic Bike Lockers	05ALA01	50,000
City of Alameda		
Park Street Business District Garage		
Electronic Bicycle Locker Project	07ALA02	28,194
City of Fremont		
Signal Retiming: Mowry, Stevenson, Blacow	07ALA04	60,354
City of Hayward		
Class II and III Bikeways	07ALA05	95,400
City of Oakland		
Bay Trail Gap Closure, Fruitvale to Park Street Bridge	08ALA04	125,000
City of Pleasanton		
Pleasanton Trip Reduction Program	08ALA06	77,000
Pleasanton Trip Reduction Program	09ALA06	47,000
City of San Leandro		
San Leandro LINKS	08ALA07	165,000
County of Alameda Public Works		
Class 2 Bicycle Lanes: Wentle Street	07ALA03	150,000
Livermore Amador Valley Transit Authority		
ACE Shuttle Services - Route 54	07ALA08	36,883
ACE Shuttle Service - Route 53	08ALA09	59,864
ACE Shuttle Service - Route 54	08ALA10	84,950
Route 10 BRT TSP / Queue Jumps	08ALA11	444,722
Route 9 Operating Assistance	09ALA09	<u>86,133</u>
Total		<u>\$ 2,459,302</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Contra Costa Transportation Authority:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Contra Costa Transportation Authority		
Program Administration	08CC00	\$ 64,562
Program Administration	09CC00	66,483
SWAT/City of San Ramon		
511 Contra Costa Countywide Vanpool Incentive Program	06CC08	49,200
511 South Contra Costa County Employer Program	06CC09	72,090
511 South Contra Costa County School Transit Ticket Program	06CC10	67,250
511 Contra Costa Countywide Vanpool Incentive Program	07CC06	78,275
511 South Contra Costa County Employer Program	07CC07	84,156
511 South Contra Costa County School Transit Ticket Program/On-Line Ride Matching Program	07CC08	92,481
511 South Contra Costa County School Transit Ticket Program/On-Line Ride Matching Program	08CC08	101,303
TRANSPAC/City of Pleasant Hill		
Central/East County Employer Outreach Program	07CC04	109,988
Comprehensive Incentive Program	07CC05	682,212
Central/East County Employer Outreach	08CC04	337,992
Comprehensive Incentive Program	08CC05	490,235
Central/East County Employer Outreach	09CC04	397,855
Comprehensive Incentive Program	09CC05	492,976
West Contra Costa Transportation Advisory Committee		
West Contra Costa Bicycle Rack Program	05CC01	23,417
West Contra Costa Employer Based Trip Reduction (EBTR) Program	06CC01	113,315
Countywide Guaranteed Ride Home Program	06CC02	165,300
I-80 Corridor Transit Program	06CC03	85,214
I-80 Plus Commute Incentive Program	07CC01	156,500
West County Employer Outreach	07CC02	54,230
Guaranteed Ride Home	07CC03	<u>127,018</u>
Total		<u>\$ 3,912,052</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Transportation Authority of Marin:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Transportation Authority of Marin		
Los Ranchitos Road Class II Bikeway	05MAR07	\$ 160,000
Program Administration	08MAR00	18,062
Vanpool Program	08MAR02	75,350
Program Administration	09MAR00	17,447
Bolinas Community Public Utility District		
Class I Bicycle Path - Olema-Bolinas and Mesa Roads	05MAR01	40,000
County of Marin		
Video Conference Training Rooms	05MAR06	67,243
Class I Bicycle Path - Cal Park Hill Tunnel Rehabilitation and Multi-Use Pathway	06MAR01	536,252
Golden Gate Bridge Highway and Transportation District		
Purchase and Install 3-Space Bike Racks on 135 Buses	07MAR02	99,247
San Anselmo Police Department		
Hybrid Electric Vehicles	09MAR02	4,000
Town of Fairfax		
Manor Circle Safe Routes to School Pedestrian/Bicycle Bridge and Sidewalk	05MAR08	<u>67,470</u>
Total		<u>\$ 1,085,071</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Napa County Transportation and Planning Agency:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Napa County Transportation Planning Agency		
Hybrid Transit Buses	06NAP07	\$ 112,828
City of Calistoga		
Calistoga Employee Bicycling Incentives Project (Bikes, Bike Lockers and Racks)	09NAP05	7,759
City of Napa		
Trancas Class - 2 Bicycle Lane	06NAP02	81,816
Commuter Bike Path Phase III - Class I Bike Path from Marin Street to Vallejo Street	09NAP06	120,602
City of St. Helena		
Fleet Modernization: Purchase of Four Hybrid Vehicles	07NAP05	4,000
County of Napa		
Light-Duty Hybrid Vehicle Purchase	07NAP02	26,000
Napa City-County Bicycle Lockers	09NAP01	7,800
Solano Transportation Authority		
Commuter Incentives and Guaranteed Ride Home	06NAP05	<u>25,000</u>
Total		<u>\$ 385,805</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Santa Clara Valley Transportation Authority:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Santa Clara Valley Transportation Authority		
Light Rail Shuttle Program	07SC06	\$ 383,000
Program Administration	08SC00	123,020
Light Rail Shuttle Bus Program	08SC01	458,000
Program Administration	09SC00	111,157
Light Rail Shuttle Program	09SC06	593,000
County Expressways Weekday Signal Timing	09SC07	168,000
Citywide Bicycle Racks	09SC08	7,000
City of Morgan Hill		
West Little Llagas Creek Trail Phase 2	07SC08	48,101
City of Mountain View		
Stevens Creek Trail Reach 4 Segment 2 Central Sub-segment A	06SC05	275,000
City of San Jose		
Light Rail Transit Controller Upgrade Project	06SC09	600,000
San Jose Bicycle Racks	08SC02	50,000
LRT Controller Upgrade Project Phase 2	08SC04	545,450
City of Sunnyvale		
Blair Avenue Traffic Calming Project	05SC01	77,966
Sunnyvale-Saratoga/Mathilda Avenues Adaptive Traffic Signal Timing	05SC02	315,000
San Jose Airport		
Conversion of Conventionally Fueled Airport Ground Transportation Vehicles to Alternative Fuels	07SC01	79,709
Upgrade to Airport's CNG Fueling Station	07SC02	526,684
Santa Clara County		
County Expressways Weekend Signal Timing	07SC05	135,000
Almaden & San Tomas Expressways Signal Timing	08SC03	<u>150,000</u>
Total		<u>\$ 4,646,087</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

San Francisco County Transportation Authority:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
San Francisco County Transportation Authority		
Program Administration	08SF00	\$ 36,827
Program Administration	09SF00	35,718
City and County of San Francisco:		
Department of Environment		
Guaranteed Ride Home Program	05SF03	9,494
Bicycle Fleet Program	07SF03	26,678
Commuter Benefits Program	07SF04	129,660
San Francisco Municipal Transportation Agency/Department of Parking and Traffic Enforcement Bicycle Patrol Fleet	07SF05	20,973
Clean Air Taxi Vehicles - 20 Light-Duty Vehicles	07SF06	73,496
Department of Parking and Traffic		
Class II Bicycle Lanes and Roadway Markings Claremont Boulevard	06SF05	25,844
Class II Bicycle Lane - Kansas Street	06SF10	20,849
Pavement Stencils on Class III Bicycle Routes	99SF07	109,561
Sidewalk Bicycle Racks	04SF05	93,394
Class II Bicycle Lanes - Mississippi St.	04SF06	3,824
County of San Francisco		
Clean Air Taxi Vehicles - Purchase 52 Light-duty Vehicles	08SF02	109,200
Golden Gate Bridge, Highway & Transportation District		
Diesel Tow Truck Engine Repower	09SF06	15,000
Presidio Trust		
PresidiGo Shuttle CNG Shuttle Fleet Addition	08SF05	46,884
Presidio Shuttle CNG Heavy Duty Vehicles	09SF09	97,500

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

San Francisco County Transportation Authority (continued):

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
San Francisco Bay Area Rapid Transit District		
Embarcadero Bikestation - Operating and Maintenance	07SF01	17,058
San Francisco International Airport		
San Francisco International Airport - Compressed Natural Gas Hotel Shuttles	06SF14	186,250
Super Low Emissions CNG Airport Shuttle Vans	07SF13	96,000
San Francisco Municipal Transportation Agency		
Class II Bicycle Lane - Clipper Street	06SF11	21,377
Bayview Gateway Enhancement Project	07SF09	22,374
Diamond Heights Boulevard Traffic Calming and Pedestrian Safety Project	07SF10	46,055
Inner Sunset Pedestrian Islands	07SF11	71,782
Class II Bicycle Lane - Otis Street Westbound	07SF12	11,500
University of California San Francisco		
UCSF Hospital Bicycle Parking	07SF14	8,582
Yellow Cab Cooperative		
Yellow Cab Coop CNG Taxicab Program	07SF15	<u>132,000</u>
Total		<u>\$ 1,467,880</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

City/County Association of Governments of San Mateo County:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
City/County Association of Governments of San Mateo County		
Program Administration	08SM00	\$ 48,320
Program Administration	09SM00	29,242
Peninsula Traffic Congestion Relief Alliance		
County-Wide Voluntary Trip Reduction Program	08SM01	495,995
County-Wide Voluntary Trip Reduction Program	09SM01	431,400
San Mateo County Transit District		
Sam Trans Shuttle Bus Program	08SM02	630,938
Sam Trans Shuttle Bus Program	09SM02	<u>547,600</u>
Total		<u>\$ 2,183,495</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Solano Transportation Authority:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Solano Transportation Authority		
Program Administration	08SOL00	\$ 15,608
Program Administration	09SOL00	15,242
Solano Napa Commuter Information Incentives & Outreach Program	07SOL04	222,247
Solano Commute Alternative Services	08SOL02	207,253
Solano Commute Promotion and Incentive Activities	09SOL02	250,000
City of Benicia		
East 5th Street Corridor Smart Growth Project	05SOL02	125,000
City of Fairfield		
Solano Bikeway Extension - McGary Road	06SOL01	90,000
Union Avenue/Suisun Train Station Pedestrian Safety Improvement Project	07SOL03	87,248
City of Suisun City		
McCoy Creek Multi-Use Path	05SOL03	35,000
Transit Center Pedestrian Access	05SOL04	25,000
City of Vallejo		
Solano Bikeway - Vallejo Class II Bicycle Gap Closure Segment	10SOL01	<u>88,000</u>
Total		<u>\$ 1,160,598</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TRANSPORTATION FUND FOR CLEAN AIR PROGRAM MANAGER FUND
AUDIT SUMMARY REPORT
LISTING OF AUDITED PROJECTS BY PROGRAM MANAGER
FOR THE PROJECT PERIOD ENDED JUNE 30, 2011

Sonoma County Transportation Authority:

<u>Project Description</u>	<u>Project Number</u>	<u>Final Project Expenditures through 6/30/11</u>
Sonoma County Transportation Authority		
Program Administration Cost	08SON00	\$ 31,571
Program Administration Cost	09SON00	28,851
Sonoma County Transit		
Petaluma Transit Mall	04SON05	38,282
Windsor Intermodal Facility/ Park & Ride Lot	04SON06	66,658
Windsor Intermodal Facility / Park & Ride	05SON01	34,548
Petaluma Transit Mall	05SON02	84,582
Transit Marketing Program	06SON01	124,055
Multi-Agency Bus Stop Information Project	06SON03	29,803
Transit Marketing Program	07SON01	158,609
Replacement CNG Bus Purchase	09SON01	160,186
City of Petaluma		
Roundabout at McDowell Blvd South and Baywood Drive	06SON10	195,000
Transit/Bike Marketing Program	07SON04	143,528
City of Rohnert Park		
Broadway Parkway Bike Lanes	05SON07	40,000
Redwood Drive Class II Bicycle Lanes	06SON04	14,500
Rohnert Park Expressway Class II Bicycle Lanes	06SON05	142,000
City of Santa Rosa		
Student/Youth Pass Subsidy	06SON07	80,000
Fiscal Year 2006 Voluntary Trip Reduction Program	06SON08	154,507
FY 07 Voluntary Trip Reduction Program	07SON02	144,901
FY 07 Student/Youth Pass Subsidy	07SON03	88,000
Student Bus Pass Subsidy	08SON03	88,000
Santa Rosa Free Ride Program	08SON04	189,856
Santa Rosa Free Ride Trip Reduction Program	09SON02	158,932
City of Sebastopol		
Bike Rack Program & Bike Route Signage	09SON04	20,000
Town of Windsor		
Arata & Hembree Lane Bicycle Lanes	06SON11	30,000
Old Redwood Highway Bicycle Lane - 1000 feet southerly of Pleasant Avenue to Lakewood	07SON05	79,964
Town Center Bike Lockers	08SON05	2,986
Mitchell Lane Bicycle Lanes	08SON06	10,400
Total		<u>\$ 2,339,719</u>

**Attachment 3: FYE 2012 Report on TFCA Regional Fund
Expenditures and Effectiveness**



Bay Area Air Quality Management District

FISCAL YEAR ENDING 2012

**TRANSPORTATION FUND
FOR
CLEAN AIR (TFCA)**

**REPORT ON REGIONAL FUND
EXPENDITURES AND EFFECTIVENESS**

939 Ellis Street, San Francisco, CA 94109
www.baaqmd.gov

November 2012

Background

This Report summarizes expenditures for TFCA Regional Fund projects that concluded during fiscal year ending 2012 (FYE 2012).

Highlights of the Report

- ◆ **TFCA funds were allocated to eligible recipients for eligible projects and programs, consistent with the legislation that authorizes the TFCA.**
- ◆ **The TFCA Regional Fund expenditures for projects and programs that concluded in FYE 2012 totaled \$9.74 million, including \$7.40 million for projects, \$1.59 million for Air District programs, and \$744,000 in administrative and indirect costs.**
- ◆ **The lifetime emission reductions achieved by these projects and programs are estimated to be 38.88 tons of reactive organic gases (ROG), 48.03 tons of oxides of nitrogen (NO_x), and 19.70 tons of particulate matter (PM₁₀). Combined lifetime emission reductions for the three pollutants total 106.60 tons.**
- ◆ **The lifetime reduction in carbon dioxide (CO₂, a greenhouse gas) from these projects is approximately 32,550 tons.**

Introduction

On-road motor vehicles, including cars, trucks, and buses, constitute the most significant source of air pollution in the San Francisco Bay Area. Vehicle emissions contribute to unhealthy levels of ozone (summertime "smog") and particulate matter.

The TFCA

In 1991, the California State Legislature authorized the Air District to impose a \$4 surcharge on motor vehicles registered within the San Francisco Bay Area to fund projects that reduce on-road motor vehicle emissions. The Air District has allocated these funds to its Transportation Fund for Clean Air (TFCA) to fund eligible projects. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242.

Sixty percent (60%) of TFCA funds are awarded directly by the Air District through a grant program known as the Regional Fund. The remaining forty percent (40%) of TFCA funds are forwarded to the designated agency within each Bay Area county and distributed by these agencies through the County Program Manager Fund. Portions of the TFCA Regional Fund are allocated to eligible programs implemented directly by the Air District such as the Smoking Vehicle Program and the Spare the Air Program. The balance is allocated on a competitive basis to eligible projects proposed by project sponsors.

The Air District Board of Directors has adopted criteria for the evaluation and ranking of project applications for TFCA Regional Funds. Cost-effectiveness, expressed in terms of TFCA dollars per ton of reduced emissions, is the most important criterion for ranking projects.

TFCA-funded projects have many benefits, including the following:

- ♦ Reducing air pollution, including toxic particulate matter;
- ♦ Conserving energy and helping to reduce emissions of carbon dioxide (CO₂), a greenhouse gas;
- ♦ Reducing traffic congestion; and
- ♦ Improving physical fitness and public safety by facilitating pedestrian and other car-free modes of travel.

State legislation restricts TFCA funding to the following types of projects:

- ♦ **Implementation of ridesharing programs**
- ♦ **Clean fuel school and transit bus purchases or leases**
- ♦ **Feeder bus or shuttle service to rail and ferry stations and to airports**
- ♦ **Arterial traffic management**
- ♦ **Rail-bus integration and regional transit information systems**
- ♦ **Demonstrations in congestion pricing of highways, bridges and public transit**
- ♦ **Low-emission vehicle projects**
- ♦ **Smoking vehicles program**
- ♦ **Vehicle buy-back scrappage program**
- ♦ **Bicycle facility improvement projects**
- ♦ **Physical improvements that support “smart growth” projects**

Expenditures

This report covers TFCA Regional Fund projects and Air District sponsored programs with expenditures that concluded during FYE 2012.

The TFCA Regional Fund expenditures for projects and programs that concluded in FYE 2012 totaled \$9.74 million. This total includes \$1.59 million for the two programs administered directly by the Air District and \$7.40 million in grants to other organizations for projects. In addition, the Air District expended \$743,926.18 in administrative and audit costs associated with the oversight of these projects and programs.^a Appendix A lists expenditure details.

^a In FYE 2012, total TFCA revenues, for both the Regional Fund and County Program Manager Fund, were \$23.71 million. Administrative and audit costs across both programs totaled \$1.24 million.

Effectiveness

Air District staff calculates the emissions reduced over the life of projects that receive TFCA funding.

Projects and programs concluding in FYE 2012 are anticipated to reduce criteria pollutant emissions over their lifetimes by an estimated total of 106.6 tons. This total is the sum of ozone precursors (38.88 tons of ROG and 48.03 tons of NO_x) and particulate matter (19.70 tons of PM₁₀). The lifetime reduction of CO₂ is estimated at approximately 32,550 tons. It should be noted that for five of the projects listed in Appendix A, totaling nearly \$101,000 in expenditures, the emissions reduced are based on the Air District's default cost effectiveness value of \$90,000 for Bicycle Facility Program projects which does not require the cost-effectiveness calculation to be performed on a per project basis.

The cost-effectiveness of TFCA projects is calculated by dividing the TFCA funds allocated to projects by the lifetime criteria pollutant emissions reductions (ROG, NO_x, and weighted PM₁₀ combined). The result is TFCA dollars per ton of reduced emissions.

A summary of expenditures, emission reductions, and cost-effectiveness values is provided in Table 1.

Table 1: Emission Reductions and Cost-Effectiveness (C/E) by Project Category for Projects and Programs Concluding in FYE 2012

Category	# of Projects	TFCA \$ Expended	% of TFCA \$ Expended	Emissions Reduced (tons) ¹	% of Emissions Reduced	C/E - Weighted (\$/tons) ²
Bicycle Facilities	9	\$554,904	6.17%	1.85	1.74%	\$144,318
Shuttle / Feeder Bus and Ride Sharing	11	\$5,240,077	58.25%	57.97	54.38%	\$69,020
Retrofits and Repowers	2	\$484,534	5.39%	3.32	3.12%	\$48,536
Heavy Duty Vehicles	1	\$91,011	1.01%	1.61	1.51%	\$45,563
Light Duty Vehicles	3	\$489,015	5.44%	5.07	4.76%	\$18,067
Alt Fuel and Infrastructure	3	\$43,778	0.49%	1.29	1.21%	\$30,304
Arterial Management & Smart Growth	3	\$500,803	5.57%	6.22	5.83%	\$57,075
Spare the Air	1	\$947,651	10.53%	17.70	16.60%	\$43,262
Smoking Vehicle	1	\$644,167	7.16%	11.57	10.86%	\$35,132
Total for Projects and Programs	34	\$8,995,940	100%	106.603	100%	\$56,828
Administration	1	\$743,926				

(1) Lifetime emission reductions of ROG, NO_x, and PM₁₀ combined.

(2) Consistent with the current California Air Resources Board methodology to calculate cost-effectiveness for the Carl Moyer Program, PM emissions were weighted by a factor of 20 to account for their harmful impacts on human health.

(3) Totals may vary due to rounding.

**APPENDIX A:
TFCA Regional Fund Projects and Air District Programs Concluding in FYE 2012**

<i>Project #</i>	<i>Sponsor</i>	<i>Project Title</i>	<i>TFCA \$ Expended</i>
03R30	County of San Francisco (SF)	Class 2 Bicycle Lanes - Folsom and Illinois Streets	\$89,535.30
05R16	City of Oakland	Lakeshore Avenue Bicycling/Pedestrian Improvements	\$350,000.00
05R24	City of San Francisco	BikeInsight - Online Bike Route Mapping Tool	\$200,000.00
05R26	San Francisco MTA	Alemanly Blvd. Bike Lanes - Lyell to Bayshore	\$129,411.19
06R10	SamTrans	Adaptive Transit Signal Priority	\$116,533.77
06R17	Golden Gate Park Concourse Authority	Page & Stanyan Bicycle and Pedestrian Improvement Project	\$35,000.00
06R39	South San Francisco Scavenger Co.	Purchase One CNG Roll-off Truck	\$91,011.00
07BFP17	Town of Windsor	Windsor River Road Class II Bicycle Lane	\$19,448.24
07R07	AC Transit	TravelChoice Transportation Marketing	\$301,050.01
07R60	San Francisco International Airport	Purchase 27 CNG Vans	\$198,331.48
07R69	SF Municipal Transportation Agency	7th Avenue Traffic Calming	\$34,269.71
08R20	San Francisco International Airport	Purchase 26 medium-duty CNG vehicles	\$266,545.84
08R37	Independent Construction	Retrofit 11 Heavy Duty Vehicles	\$112,088.62
08R50	San Francisco International Airport	Retrofit 23 Diesel Shuttle Vehicles - Level 3 devices	\$372,445.19
09BFP01	City of Oakland	Class II and Class II Bikeways on E. 12th Street	\$10,500.00
09BFP03	City of Daly City	Southgate Ave Class II Bicycle Lane Gap Closure	\$18,783.40
09BFP04	City of Petaluma	Class III Bicycle Routes in Petaluma	\$45,313.35
09BFP10	City of Santa Rosa Dept. of Public Works	Class II Bicycle Lane on Coffey Lane	\$6,912.90
09R07	San Joaquin Regional Rail Commission	ACE Shuttle - Route 53	\$44,000.00
09R08	Metropolitan Transportation Commission	511 Rideshare Program	\$1,750,000
09R11	Peninsula Corridor Joint Powers Board	Caltrain Shuttle	\$992,867.98
09R13	San Francisco General Hospital	SFGH Pilot Shuttle	\$31,488.74
09R27	Breathe California - Silicon Valley Clean Cities	US DOE Clean Cities Coalition Outreach (SV)	\$25,000.00
09R31	City of Palo Alto	(6) Electric Vehicle Charging Spots	\$6,777.76
09R43	East Bay Regional Parks	(3) Medium Duty Vehicle Purchase	\$24,137.97
09R54	Citrix	(6) Charging Points	\$12,000.00
10R05	Santa Clara Valley Transportation Authority	ACE Shuttle Bus Program	\$919,999.93
10R06	Assoc. Students, San Jose State University	SJSU - Ridesharing and Trip Reduction	\$120,000.00
10R07	City of Redwood City	Redwood City Commuter Shuttle	\$20,000.00
10R09	San Joaquin Regional Rail Commission	Wheels - Route 54	\$50,000.00
10R10	San Joaquin Regional Rail Commission	Wheels - Route 53	\$10,670.00
10R11	Peninsula Corridor Joint Powers Board	Caltrain Shuttle Project	\$1,000,000.00
Subtotal Projects:			\$7,404,122.38
FYE 2012	BAAQMD	Smoking Vehicle Program	\$644,167.13
FYE 2012	BAAQMD	Spare the Air	\$947,650.52
Subtotal Air District Programs:			\$1,591,817.65
FYE 2012	BAAQMD	TFCA Regional Fund Administration	\$743,926.18*
Grand Total:			\$9,739,866.21

* 60% of the total administrative and audit costs expended in FYE 2012.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Scott Haggerty and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 27, 2012

Re: Port Truck Program Update

RECOMMENDATION:

None; informational item, receive and file.

BACKGROUND

In December of 2007, the California Air Resources Board (ARB) approved a regulation to reduce emissions from drayage trucks operating at California’s ports and intermodal rail yards. The first phase of the regulation went into effect on December 31, 2009, and Phase 2 of the regulation goes into effect on December 31, 2013. A summary of the regulation’s compliance requirements is shown in Table 1.

Table 1: ARB Drayage Truck Regulation Compliance Schedule

Phase	Date	Engine Model Years (MY)	Regulation requirement
Phase 1	12/31/09	1993 and older	Prohibited from operation as a drayage truck
		1994 – 2003	Install a Level 3 retrofit device
	12/31/11	2004	Install a Level 3 retrofit device
	12/31/12	2005 and 2006	Install a Level 3 retrofit device
Phase 2	12/31/13	1994 – 2006	Meet 2007 * engine emissions standards

* Trucks with 2007-2009 model year engines are compliant through 2022. Trucks with 2010 and newer engines are fully compliant

As part of this report, the Committee will be updated on the Bay Area Air Quality Management District’s (Air District) continued efforts to assist port truck drivers in reducing their emissions ahead of the interim Phase I and Phase II regulatory deadlines.

DISCUSSION

Table 2, below contains data from ARB’s Drayage Truck Registry database, and describes the population of vehicles calling on Northern California ports by engine model year. Table 2 also identifies the number of trucks that received grant funds from the Air District Drayage Truck Program in 2009/2010 (over \$25 million for port truck retrofits and replacements).

Table 2: Drayage truck population as of November 2011

Engine MY	Compliant until	# of Drayage trucks in Northern CA ¹	# of trucks that received grant funds	Grant funds contracted/ expended
1994-2003 (w/ retrofits)	12/31/13	1,700	1,319 retrofits	\$15,586,534 ²
			708 <i>contracted</i>	\$19,230,000 ³ <i>contracted</i>
2004 (w/ retrofits)	12/31/13	700	4	\$40,000
2005 & 2006	12/31/12	2,200	TBD	TBD
2007 – 2009	12/31/22	1,400	203	\$10,150,000 ²
2010 +	Fully compliant	500		
Total		6,500	2,234	\$45,006,534

Notes:

1. Trucks registered in the ARB Drayage Truck Registry (DTR) with zip codes North of Fresno.
2. Funding sources for the Air District’s Year 1 port truck funding program: TFCA (\$5 million), Port (\$5 million), ARB Prop 1B (\$13,835,133), and DERA (~\$2 million)
3. I-Bond Year 3 funding

I-Bond Year 3 Program

On March 7, 2012, the Air District’s Board of Directors approved participation in Year 3 of the California Goods Movement Bond Program (I-Bond), and authorized the Executive Officer to enter into agreements for port truck projects ranked and approved by the ARB. The Year 3 program provides up to \$30,000 in grant funding for the replacement of port trucks with engine model years between 1994 and 2003.

In contrast to the previous I-Bond port truck program, the Year 3 funding cycle was structured by ARB as a closed process only available to the trucks meeting specific eligibility requirements. There were approximately 1700 port trucks eligible to participate in this program. Applications for this funding cycle were submitted to ARB for initial review, and then forwarded to Air District staff for completeness checks, eligibility review, contracting and administration.

When the application period closed on February 9, 2012, over 950 project applications had been submitted. Staff completed the evaluation of all applications by early March and submitted a list of 888 eligible trucks to ARB that were then ranked and approved for funding. As a result of this process, ARB awarded the Air District \$24,065,000 in I-Bond funds for port truck replacement projects.

As of the July 31, 2012, contracting deadline 708 trucks (\$19,230,000) were awarded project funding. The replacement trucks funded through this program must be delivered, inspected and on the road by December 31, 2012. The \$4.8 million in Year 3 funding that was allocated to the Air District but was not contracted for port trucks is being used to fund additional on-road truck replacement projects as part of the District’s Year 2 I-Bond program.

The Air District also plans to allocate an additional \$1.55 million in Diesel Emission Reduction Act (DERA) funding from the U.S. Environmental Protection Agency to fund more port truck replacement projects.

MY 2005/ 2006 Program

On March 7, 2012, the Air District's Board of Directors approved a program that provides grant opportunities for the approximately 900 engine MY 2005/ 2006 port trucks registered in the Bay Area. The program is funded by a combination of the balance of the 2004 drayage truck program funding, \$1 million in TFCA Regional Funds, and \$1.43 million in Alameda County TFCA Program Manager Funds. The program provided \$10,000 grants to assist the truck owners in replacing their trucks in advance of regulatory requirements.

As part of the program Cascade Sierra Solutions (CSS) contracted with the Air District to assist with program implementation, coordination of truck trade-ins, and the sale of new trucks. Outreach for the program was done through a direct mailing to eligible applicants, a workshop/ trucker event at the Port of Oakland, and through mailing lists maintained by the Air District, Port of Oakland and local trucker groups.

The program accepted 87 project applications between August 16, 2012 and September 28, 2012. The low application rate is believed to be a result of the grant award amounts, and the costs of the new trucks. Original estimates for truck trade-in values were expected to be around \$15,000 but actual appraisals show an average trade-in value of \$10,000 for the MY 2005/ 2006 trucks. The lower trade-in values are due high mileage and the poor condition of many of the trucks.

Currently staff is completing the application evaluations, pre-project inspections, and contracting with the truck owners. All trucks funded through this program must be on the road by December 31, 2012. Based on the fact that the program was undersubscribed the \$1.43 million in Alameda County TFCA Program Manager funds will be returned to the County for reallocation. The remaining Air District program funds will be reallocated to eligible TFCA projects and brought to the Committee for consideration.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. The Air District receives funding for the administration of these programs as part of the TFCA and I-Bond programs.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Anthony Fournier
Reviewed by: Damian Breen

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 28, 2012

Re: Report of the Legislative Committee Meeting of December 3, 2012

PROPOSED RECOMMENDED ACTION

The Committee will consider recommending the Board of Directors approval of the following items:

- A) None; informational item, receive and file.
- B) The Committee will consider recommending to the Board of Directors approval of a legislative agenda for 2013.

BACKGROUND

The Committee will meet on Monday, December 3, 2012, and receive and consider the following reports:

- A) Review of the 2012 Legislative Year.
- B) Potential Legislative Agenda for 2013.

Attached are the staff reports that will be presented to the Legislative Committee.

Chairperson Tom Bates will give an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACTS:

- A) None.
- B) None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Sean Gallagher

Approved by: Ana Sandoval

Attachment(s)

AGENDA: 4

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Tom Bates and Members
of the Legislative Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 26, 2012

Re: Review of the 2012 Legislative Year

RECOMMENDED ACTION:

None; informational item.

BACKGROUND

The California Legislature concluded its 2011-2012 session on August 31, 2012, and the Governor concluded his work signing and vetoing the measures the Legislature sent him on September 30, 2012. Now that the dust has settled, here is a summary of how air quality legislation fared this past year.

DISCUSSION

The Air District had two primary legislative goals for 2012: to minimize budgetary cuts from the State, and to pass our transit commute benefits requirement (SB 1339, authored by Senator Leland Yee). We achieved both goals. Despite the substantial budget cuts made to a host of state programs by the Legislature and the Governor, the District was unscathed. Given the magnitude of the State's financial troubles, this was a very positive outcome for us.

The Air District sponsored SB 1339 this year. It is similar to last year's SB 582, which was ultimately vetoed by the Governor. SB 1339 allows the Air District and the Metropolitan Transportation Commission to jointly adopt a commute benefit requirement on employers of 50 or more in the Bay Area. Affected employers would choose one of several benefits to offer their employees, including simply allowing interested employees to pay for their own transit or vanpooling with pre-tax dollars.

The bill gives the region a new tool to use to help achieve the greenhouse gas emission reductions mandated by SB 375. It has both environmental and economic benefits. While the bill was opposed by the California Taxpayers Association and the California Manufacturers and Technology Association, we built a broad coalition of supporters, including environmental, business, and other organizations. The bill passed the Legislature with bipartisan support, and was signed by the Governor on September 30, 2012.

Of the additional bills that the Air District adopted positions on, the most significant was SB 1455, authored by Senator Christine Kehoe. This bill changed in the hectic last several weeks of the session into a measure to reauthorize critical air quality funding programs. Specifically, it would have extended the Carl Moyer, the AB 118, and AB 923 programs. Together these programs provide roughly \$24 million in the Bay Area alone each year for emission reductions. This bill initially reflected the conditions of a deal reached between the Western States Petroleum Association (WSPA), the Air Resources Board (ARB), the California Natural Gas Vehicle Coalition, and CalSTART (a clean transportation technology incubator). In exchange for ARB waiving some requirements on refiners to provide hydrogen fueling stations (for fuel cell vehicles), WSPA agreed to support an extension of the AB 118 program.

As the deal became public, and air districts and others became involved, SB 1455 was quickly expanded to include the extension of the Moyer and AB 923 programs as well. This bill required a two thirds vote of both the Assembly and the Senate. It was supported by a remarkably broad coalition of interests, although it had opposition as well. While it passed the Assembly, it ultimately failed passage in the Senate literally at midnight two votes short of the required supermajority.

There were multiple other bills put forth this session that the Air District opposed. Many of these were justified by their authors as necessary to help protect businesses in a tough economy from the unfair costs of air quality requirements. They included measures to eliminate vehicle smog checks, weaken ARB’s heavy-duty vehicle smoke inspection program, roll back existing ARB regulations, and delay the move of Bay Area regional agencies to 390 Main Street. The good news is that all measures the Air District opposed in 2012 failed passage in the Legislature.

A complete list of bills with air quality significance (far more bills than those the Air District adopted positions on) is attached to this memorandum.

OUTCOME OF BILLS THE DISTRICT HAD POSITIONS ON

BILL AND AUTHOR	SUBJECT	POSITION	OUTCOME
AB 1532 Perez	Creates the Greenhouse Gas Emission Reduction Fund for revenues from auction of GHG allowances	Support	Chaptered
AB 1537 Cook	Would sunset new state regulations with economic costs over \$1M after two years, unless Legislature passes a bill deciding otherwise	Oppose	Failed passage
AB 1613 Donnelly	Eliminates smog check on transfer of vehicle ownership	Oppose	Failed passage
AB 1721 Donnelly	Requires first violations of air quality laws to result only in a warning	Oppose	Failed passage
AB 1922	Amends commercial heavy-duty vehicle smoke inspection	From Oppose to	Chaptered

Lara	requirements; was amended to address our opposition	Neutral	
AB 2024 Mendoza	Reduces the number of vehicles subject to ARB's In-Use On-Road diesel regulation	Oppose	Failed passage
AB 2091 B. Berryhill	Imposes new requirements on state agencies with regulations using new or emerging technology or equipment	Oppose	Failed passage
AB 2605 Cedillo	Allows certain city attorneys to enforce stationary source air pollution requirements	Oppose	Failed passage
SB 535 De Leon	Directs funds in the Greenhouse Gas Emission Reduction Fund to disadvantaged communities	Support	Chaptered
SB 1127 Vargas	Requires South Coast AQMD to weaken an industrial metal lubrication rule	Oppose	Failed passage
SB 1224 La Malfa	Ends smog checks for 1976 through 1981 vehicles	Oppose	Failed passage
SB 1230 Wright	Requires Occupational Safety and Health Standards Board to adopt standards for diesel emission reduction control equipment required by ARB regulation	Oppose	Failed passage
SB 1339 Yee	Authorizes BAAQMD and MTC to enact a transit commute benefits requirement	Sponsor	Chaptered
SB 1455 Kehoe	Reauthorizes Moyer, AB 118, and AB 923 air quality incentive and funding programs, and makes changes to ARB's Clean Fuel Outlet regulation	Support	Failed passage
SB 1545 DeSaulnier	Prohibits spending of public funds on development or improvement of 390 Main St. until state audit is completed, and the issues raised are addressed	Oppose	Failed passage

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Tom Addison

Attachments

Summary of the 2011-2012 Legislative Year BAAQMD Bill Discussion List

November 2012

BILL NO.	AUTHOR	SUBJECT	POSITION	OUTCOME
AB 819	Wieckowski	Allows non-standard bikeways to be constructed in some circumstances		Chaptered
AB 1532	Perez	Establishes Greenhouse Gas Reduction Account for cap-and-trade moneys	Support	Chaptered
AB 1537	Cook	Would sunset new state regulations with economic costs over \$1M after two years, unless Legislature passes a bill deciding otherwise	Oppose	Failed Passage
AB 1549	Gatto	Assigns new tasks on permit streamlining to Office of Permit Assistance, including mediation of disputes, and would require their involvement in local agency decisions		Failed Passage
AB 1608	Wieckowski	Clean Vehicle Rebate Project		Failed Passage
AB 1613	Donnelly	Eliminates smog check on transfer of vehicle ownership	Oppose	Failed Passage
AB 1627	Dickinson	Requires new CEC standards for reducing vehicle miles traveled (VMT)		Failed Passage
AB 1702	Logue	AB 32 spot bill		Failed Passage
AB 1721	Donnelly	Requires first violations of air quality laws to result only in a warning	Oppose	Failed Passage
AB 1836	Fletcher	Air Quality Improvement Program spot bill		Failed Passage
AB 1900	Gatto	Affects PUC and CEC and requirements around methane gas from landfills		Chaptered
AB 1906	Nestande	AB 32 market-based compliance mechanisms spot bill		Failed Passage
AB 1922	Lara	Amends heavy-duty commercial vehicle smoke inspection requirements; was amended to remove our initial opposition	From Opposed to neutral	Chaptered
AB 1959	Williams	Would require California Building Stds. Commission to consider adopting standards for toxic air contaminants as part of mandatory minimum building standards		Failed Passage
AB 2024	Mendoza	Reduces the number of vehicles subject to ARB's In-Use On-Road diesel regulation	Oppose	Failed Passage
AB 2045	Perea	Applies to expedited permits and fees in the San Joaquin Valley Air District		Failed Passage

AB 2091	B. Berryhill	Imposes new requirements on state agencies with regulations using new or emerging technology or equipment	Oppose	Failed Passage
AB 2135	Blumenfield	Requires CA Building Standards Commission to adopt model ordinance and guidelines for solar electric residential and commercial installations		Failed Passage
AB 2173	Skinner	Liberalizes existing MTC regional gas tax authority in several ways		Failed Passage
AB 2200	Ma	Would have weakened HOV requirements on Hwy 80 in Bay Area		Vetoed
AB 2234	Hill	Would extend net energy metering for solar to public agencies		Failed Passage
AB 2245	Smyth	Would exempt bikeways within existing right-of-way from CEQA review		Chaptered
AB 2249	Buchanan	Allows existing incentives for solar thermal non-residential pool heating		Chaptered
AB 2257	Achadjian	Narrows the circumstances in which a landfill can be called a nuisance		Failed Passage
AB 2289	Jeffries	Changes exemption process for kit cars exempted from Smog Check		Failed Passage
AB 2339	Williams	Requires PUC, in consultation with CEC and ARB, to work to increase solar and geothermal heating and cooling		Chaptered
AB 2347	Achadjian	Tries to avoid AB 32 regulations reducing jobs in California		Failed Passage
AB 2390	Chesbro	Intent bill to create incentives for forest thinning used for biomass and electrical generation		Failed Passage
AB 2404	Fuentes	Creates Local Emission Reduction Fund with cap-and-trade AB 32 funds		Failed Passage
AB 2405	Blumenfield	Would allow "green stickered" vehicles (plug-in hybrids) into High Occupancy Toll lanes without charge, regardless of occupancy		Chaptered
AB 2412	Swanson	Requires biennial report on Air Quality Improvement Program		Failed Passage
AB 2488	Williams	Allows increased bus length to accomadate bike carriers on front of buses		Chaptered
AB 2499	Conway	Heavy duty vehicle smoke inspection spot bill		Failed Passage
AB 2563	Smyth	Requires ARB to consider adopting compliance offset protocols for AB 32, and sets limits on percentages of compliance obligations that can be met with offsets		Failed Passage
AB 2581	Conway	HOV lane spot bill		Failed Passage
AB 2583	Blumenfield	Has CEC fund alternative fuel infrastructure in public parking lots		Chaptered
AB 2605	Cedillo	Allows certain city attorneys to enforce stationary source air pollution requirements	Oppose	Failed Passage
AB 2631	Fletcher	Electric vehicle parking and charging spot bill		Failed Passage
AB 2644	Butler	Require EV parking standards to be included in next building standards update		Failed Passage

SB 52	Steinberg	CEQA streamlining for beneficial greenhouse gas reduction projects		Failed Passage
SB 535	De Leon	Directs funds in the GHG Emission Reduction Fund to disadvantaged communities	Support	Chaptered
SB 878	DeSaulnier	Requires the Bay Area regional agencies and the Joint Policy Committee to report to the Legislature on certain things	Watch	Failed Passage
SB 1076	Emmerson	Makes changes to ARB's greenhouse gas tire pressure regulation		Chaptered
SB 1127	Vargas	Requires South Coast AQMD to weaken an industrial metal lubrication rule	Oppose	Failed Passage
SB 1128	Padilla	Expands grants from CA Alternative Energy and Advanced Transportation Financing Authority to also allow 'advanced manufacturing' projects		Chaptered
SB 1130	DeLeon	Enacts Commercial Building Energy Retrofit Financing Act of 2012		Failed Passage
SB 1139	Rubio	Carbon Capture and Storage Act of 2012		Failed Passage
SB 1149	DeSaulnier	Creates new Bay Area Regional Commission		Failed Passage
SB 1222	Leno	Limits permit fees for rooftop solar electric installations		Chaptered
SB 1224	La Malfa	Ends smog checks for 1976 through 1981 vehicles	Oppose	Failed Passage
SB 1230	Runner	Requires Occupational Safety and Health Standards Board to adopt standards for diesel emission reduction control equipment required by ARB regulation	Oppose	Failed Passage
SB 1257	Hernandez	Eliminates utility user tax for electric transit bus fast chargers		Chaptered
SB 1283	Alquist	San Francisco Bay Area Sea Level Rise Planning Act		Failed Passage
SB 1339	Yee	Authorizes BAAQMD and MTC to enact a transit commute benefits requirement	Sponsor	Chaptered
SB 1445	Cannella	Motor vehicle registration fee spot bill		Failed Passage
SB 1455	Kehoe	Has ARB and CEC work together on state alternative fuel plan; reauthorizes Moyer/AB 923/AB 118 funding programs; changes hydrogen fueling regulation		Failed Passage
SB 1545	DeSaulnier	Prohibits spending of public funds on development or improvement of 390 Main St. until state audit is completed, and the issues raised are addressed	Oppose	Failed Passage
SB 1572	Pavley	Establishes Greenhouse Gas Reduction Account for spending cap-and-trade funds		Failed Passage

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Tom Bates and Members
of the Legislative Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 26, 2012

Re: Potential Legislative Agenda for 2013

RECOMMENDED ACTION:

Recommend a 2013 legislative agenda to the Board of Directors.

DISCUSSION

Major statewide air quality incentive funding programs are due to either expire or experience a significant funding reduction in the next few years. The affected programs are the Carl Moyer program, the AB 923 program, and the AB 118 program. Without a legislative extension, California will lose over \$200 million annually statewide for clean air. Without reauthorization, the Bay Area would be short up to \$24 million every year.

The Carl Moyer program provides grant funds to cut emissions from on-road heavy-duty vehicles, off-road equipment, marine vessels, trains, agricultural equipment, and for light duty vehicle retirement. The funding that would be lost comes from a fee on new tires sold in California. The AB 923 program administered by the Air District is funded by an expiring \$2 annual vehicle registration fee surcharge, and is used for diesel clean-up, cleaner school buses, and other emission reduction projects. The AB 118 program is a technology advancement and emission reduction program that includes the California Air Resources Board's Air Quality Improvement Program. Staff recommends that extending these critical air quality funding programs, in partnership with other interested parties, be a key plank of our 2013 legislative agenda.

A separate legislative issue is in the District's adopted *Work Plan for Action Items Related to Industrial Releases from Industrial Facilities*. This plan was adopted by the Board in October of 2012, in response to the August 6, 2012 fire at Chevron's Richmond refinery. In this plan, the District committed to sponsor legislation that would allow it to collect more substantial penalties from accidental releases.

The Health and Safety Code contains civil and criminal penalty guidelines for stationary source violations that are intended to encourage compliance by establishing financial consequences for violators. The penalty ceilings for violations increase based on a variety of factors. Staff notes

that for certain types of violations, the maximum penalties allowed by statute are inappropriately low. This is particularly true for violations of limited duration that affect large numbers of people. For example, a one-day release from a large industrial facility such as the Richmond refinery that affects many thousands of people would have a maximum legal penalty of only \$10,000 if negligence could not be demonstrated and there was no 'actual injury'. Actual injury is narrowly defined in statute and would not apply to individuals who were only seen once by a physician in response to an incident. However, if someone had experienced more substantive injury in response to the event, the maximum penalty would be capped at \$15,000.

Per the Board's recommendation in the work plan, staff recommends that increasing penalty ceilings for large industrial releases affecting large numbers of people also be a part of our 2013 legislative agenda.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Tom Addison

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer / APCO

Date: November 20, 2012

Re: Report and Recommendations of the Advisory Council from the February 8, 2012 meeting on Ultrafine Particles: Ambient Monitoring and Field Studies, the May 9, 2012 meeting on Ultrafine Particles: Exposure Assessment, and the September 12, 2012 meeting on Ultrafine Particles: Exposure Reduction

RECOMMENDED ACTION:

None; receive and file.

FEBRUARY 8, 2012 ADVISORY COUNCIL MEETINGSUMMARY

The following presentations were made at the February 8, 2012 Advisory Council meeting on Ultrafine Particles: Ambient Monitoring and Field Studies:

1. Atmospheric Monitoring of UFPs by Philip M. Fine, Ph.D. Dr. Fine is the Manager for Climate Change, PM Control Strategies, Annual Emissions Reports, AB2588, Meteorology, Air Quality Evaluation/AQMP at the South Coast AQMD. He previously served as the Atmospheric Measurements Manager, responsible for all field activities of numerous special air monitoring projects focusing on air toxics and the local impacts of air pollution. Prior to joining the AQMD, he was a Research Assistant Professor at the University of Southern California, Los Angeles where he taught courses and conducted extensive research on particulate pollution and its health effects.
2. Concentrations of UFPs and Related Air Pollutants On and Near Roadways and in Other Urban Microenvironments by Dr. Eric Fujita, Ph.D. Dr. Fujita is a Research Professor in the Division of Atmospheric Sciences at the Desert Research Institute, Reno. Dr. Fujita has 32 years of experience in managing and conducting air quality studies, including the LAX Air Quality Source Apportionment Study, Harbor Communities Monitoring Study, and numerous others. His research interests include chemical characterization of emission sources, reconciliation of VOC and PM emission inventory estimates with ambient measurements, measurement and characterization of exposure to toxic air contaminants from mobile sources, and quantifying the relative contribution of gasoline and diesel exhaust to ambient PM. Prior to his employment at DRI, Dr. Fujita was an Air Pollution Research Specialist for the Research Division of the California Air Resources Board (CARB).

REPORT

The Advisory Council met on March 14, 2012 and April 11, 2012 to discuss the presentations and materials received at the February 8, 2012 meeting on Ultrafine Particles: Ambient Monitoring and Field Studies and prepared a report for the Air District Board of Directors. This report, including recommendations, was finalized at the April 11, 2012 meeting and will be presented at the Board of Directors December 5, 2012 meeting. The report is attached.

MAY 9, 2012 ADVISORY COUNCIL MEETING

SUMMARY

The following presentations were made at the May 9, 2012 Advisory Council meeting on Ultrafine Particles: Exposure Assessment:

1. Indoor Exposure to Particles from Cooking, Cleaning and Smoking by Lynn M. Hildemann, Ph.D. Dr. Hildemann is an Associate Professor at Stanford University in the Environmental Engineering and Science Program of the Department of Civil and Environmental Engineering Department. Professor Hildemann's research interests include atmospheric chemistry, characterization of source emissions, dispersion modeling, and indoor air pollutants. She is currently studying the sources, chemistry and fate of organic pollutants, with a focus on aerosols. Major areas of research include investigating the sources and size distributions of indoor particulate matter (including allergens), and characterizing the uptake of water by organic aerosols. She has published more than 30 articles on her research.
2. Toward Understanding Ultrafine Particle Exposures in Indoor Environments by William W. Nazaroff, Ph.D. Dr. Nazaroff is a Professor of Engineering in the Department of Civil and Environmental Engineering at the University of California, Berkeley. Professor Nazaroff's research group studies the physics and chemistry of air pollutants in proximity to people, especially in indoor environments, in the domain of exposure science, stressing the development and application of methods to better understand mechanistically the relationship between emission sources and human exposure to pollutants. Professor Nazaroff presently serves as editor-in-chief of Indoor Air, president of the American Association for Aerosol Research (AAAR), president of the Academy of Fellows in the International Society of Indoor Air Quality and Climate (ISIAQ), and member of the California Environmental Protection Agency's Scientific Review Panel on Toxic Air Contaminants. He has published 130+ articles on his research.

REPORT

The Advisory Council met on June 13, 2012 and July 12, 2012 to discuss the presentations and materials received at the May 9, 2012 Advisory Council meeting on Ultrafine Particles: Exposure Assessment, and prepared a report for the Air District Board of Directors. This report, including recommendations, was finalized at the July 12, 2012 meeting and will be presented at the Board of Directors December 5, 2012 meeting. The report is attached.

SEPTEMBER 12, 2012 ADVISORY COUNCIL MEETING

SUMMARY

The following presentations were made at the September 12, 2012 Advisory Council meeting on Ultrafine Particles: Exposure Reduction:

1. Exposure to Ultrafine Particles on and Near Roadways by Yifang Zhu, Ph.D. Professor Zhu is currently an Associate Professor at the University of California, Los Angeles in the Environmental Health Sciences Department in the Fielding School of Public Health. Prior to that, she worked as an Assistant Professor in the Environmental Engineering Department at Texas A&M-Kingsville. Her research focuses primarily in the field of environmental exposure assessment and aerosol science and technology. Specifically, she is interested in determining the data necessary to fill the knowledge gap in quantitative exposure/risk assessments on vehicular emitted ultrafine particles that have shown higher toxicity than larger particles on a unit mass basis. Her current research focuses on identifying key factors that affect human exposure to ultrafine particles on and near roadways by measuring and modeling their emissions, transport, and transformation in the atmosphere as well as into the in-cabin and indoor environments. These research efforts are supported by two prestigious national awards, the National Science Foundation Faculty Early Career Development (CAREER) Award and the Walter Rosenblith New Investigator Award from the Health Effects Institute.
2. Policy Strategies to Reduce Health Effects from Particulates by Rajiv Bhatia, MD, MPH. Dr. Bhatia is the Director of Occupational and Environmental Health for the San Francisco Department of Public Health and an Assistant Clinical Professor of Medicine at the University of California San Francisco. He has been responsible for environmental health law and policy in San Francisco since 1998 and has broadened the scope of local environmental health to include issues of labor rights, working conditions, housing, land use, transportation, injury prevention, and food security. He has pioneered the practice of health impact assessment (HIA) in the US, institutionalizing a HIA unit in San Francisco government, teaching the first US graduate course on HIA at the University of California at Berkeley, and co-founding Human Impact Partners, a non-profit organization working nationally to build the field. He is a founding member of the Health and Social Justice Team for the National Association of County and City Health Officials and the co-editor of *Tackling Health Inequities through Public Health Practice: Theory to Action*. Dr. Bhatia earned a MD from Stanford University in 1989.

REPORT

The Advisory Council met on October 10, 2012 and November 14, 2012 to discuss the presentations and materials received at the September 12, 2012 Advisory Council meeting on Ultrafine Particles: Exposure Reduction, and prepared a report for the Air District Board of Directors. This report, including recommendations, was finalized at the November 14, 2012 meeting and will be presented at the Board of Directors December 5, 2012 meeting. The report is attached.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS:

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Attachment 1: Final Report on February 8, 2012 Advisory Council Meeting

Attachment 2: Final Report on May 9, 2012 Advisory Council Meeting

Attachment 3: Final Report on September 12, 2012 Advisory Council Meeting

Prepared by: Eric Stevenson

AGENDA: 6A

REPORT ON THE FEBRUARY 8, 2012 ADVISORY COUNCIL MEETING ON ULTRAFINE PARTICLES: AMBIENT MONITORING AND FIELD STUDIES

SUMMARY

The following presentations were made at the February 8, 2012 Advisory Council meeting on Ultrafine Particles (UFPs; see list of definitions for all acronyms): Ambient Monitoring and Field Studies:

1. Atmospheric Monitoring of UFPs by Philip M. Fine, Ph.D. Dr. Fine is the Manager for Climate Change/PM Control Strategies/Annual Emissions Reports/AB2588/Meteorology/Air Quality Evaluation/AQMP at the South Coast AQMD. He previously served as the Atmospheric Measurements Manager, responsible for all field activities of numerous special air monitoring projects focusing on air toxics and the local impacts of air pollution. Prior to joining the AQMD, he was a Research Assistant Professor at the University of Southern California, Los Angeles where he taught courses and conducted extensive research on particulate pollution and its health effects.
2. Concentrations of UFPs and Related Air Pollutants On and Near Roadways and in Other Urban Microenvironments by Dr. Eric Fujita, Ph.D. Dr. Fujita is a Research Professor in the Division of Atmospheric Sciences at the Desert Research Institute, Reno. Dr. Fujita has 32 years of experience in managing and conducting air quality studies, including the LAX Air Quality Source Apportionment Study, Harbor Communities Monitoring Study, and numerous others. His research interests include chemical characterization of emission sources, reconciliation of VOC and PM emission inventory estimates with ambient measurements, measurement and characterization of exposure to toxic air contaminants from mobile sources, and quantifying the relative contribution of gasoline and diesel exhaust to ambient PM. Prior to his employment at DRI, Dr. Fujita was an Air Pollution Research Specialist for the Research Division of the California Air Resources Board (CARB).

DISCUSSION MEETING

At the March 14, 2012 meeting, the Council discussed the presentations and the materials received at the February 8, 2012 meeting and the draft report on that meeting. At the April 11, 2012 meeting, the Council discussed and finalized the revised draft report on the February 8, 2012 meeting.

KEY POINTS

Dr. Philip M. Fine

1. Methods for measuring UFPs are still being researched and developed. A wide range of instruments exists for purchase, with many technical and price differences, and with each having precision or accuracy drawbacks. UFP measuring equipment is temperamental, takes skilled technicians to operate, and is difficult to calibrate (no NIST traceable standards exist). The scientific community has also not agreed upon the most representative or useful measurement parameters. Total particulate mass is important for exposure and toxicity data, but particle number accounts for smaller particles, which have greater health impacts. Particle number does not, however, correlate to PM mass. Europeans measure heated samples with the volatiles driven off, but volatiles impact human health.
2. Sampler distance from sources matters. The zone of influence of UFPs is typically within 300 m downwind of the source. To be representative of a source, such as a roadway, samplers should be located within its zone of influence. The zone can actually extend much beyond that, however, and is dependent on meteorological conditions and on the effects of condensation and volatilization on particle size.
3. Filters can be effective in reducing indoor UFP concentration. For example HEPA filters are effective if installed and used properly, i.e., so that all outside air is drawn through them; but they are expensive.
4. The greatest exposure to UFP for most people occurs during their commute, as freeways are the largest sources of combustion-related UFP exposure. Emissions from jet take-offs are also high, but are intermittent. Indoor UFP tends to be significantly lower than outside levels; though indoor sources such as cooking or laser printers can generate appreciable amounts of UFP.
5. Particle-number for wood smoke near forest fires peaks at a particle size of about 200 nm. This is 5 to 10 times the particle size of the peak for vehicle emissions, which occurs at about 20 nm.

Dr. Eric Fujita

1. Among the many sources of UFPs, automobiles that burn lubricating oil and "gross emitters (see list of definitions)" are significant sources. Aged lubricating oil emits less UFP than fresh oil. Zinc from engine oil is in the UFP size range, and researchers are unsure if synthetic oil will reduce UFP emissions.
2. In-vehicle exposure to UFP can be significant while driving, and is highly dependent upon emissions from vehicles immediately ahead. This exposure can be mitigated by rolling up windows and by relying on interior cabin air filters.

3. Indoor cooking increases UFP count in public buildings by up to a factor of four.

EMERGING ISSUES FROM THE ADVISORY COUNCIL

New ideas, emerging information, and data from studies that the Advisory Council believes merit further investigation or analysis include:

1. EXPOSURE:

- a. Health effects are associated with UFP number, mass, composition, and duration of exposure.
- b. UFP exposures during commuting (and alongside roads) might be the greatest source of exposure for most people. Ventilation options can greatly affect exposure level for commuters.
- c. Indoor exposure to UFP is driven by indoor sources, such as cooking, smoking, and wood burning.
- d. Better understanding is required of relationships between source concentrations and indoor concentrations of UFP. For example, one study correlated high UFP concentrations in back yards near an airport with high thrust take-offs of jet aircraft, but indoor UFP measurements at these locations were as much as 90% lower than outdoor measurements.
- e. Better understanding is needed regarding indoor UFP concentrations in schools compared to homes. Schools often have large HVAC systems with frequent air turnovers using outdoor air, and tend to have open windows. Closing windows and circulating air through an HVAC system with appropriate filters can reduce UFP pollution.
- f. Filters are reasonably effective in preventing UFP entrance into indoor spaces, provided the filters are used correctly. Other automobile-related mitigation strategies, such as tailpipe reductions, sound walls, and/or vegetative barriers may, however, be more important.

2. SOURCES OF UFP:

- a. Fuel combustion is the primary source of UFPs.
- b. Gross emitting vehicles are significant sources of UFP. Vaporization and combustion of lubricating oil from automobiles that burn lubricating oil is a significant UFP source. On-road concentrations are dominated by vehicles in front.

- c. Two-cycle engines emit more UFPs than four-cycle engines.
- d. The Advance Collaborative Emissions Study (ACES) shows that diesel engine UFP emissions from model-year 2007 and later are 90% lower than model-year 2004 levels.
- e. Jet airplanes can be important UFP sources near airports.

3. MEASUREMENTS:

- a. The best long-term methodology for measuring UFP cannot be determined at this time for several reasons:
 - i. Adoption of a UFP ambient air quality standard (AAQS) has not been proposed and may be some time off. Particle count and chemical characterization of UFP near sources is currently the best means for characterizing UFP emissions, exposures, and health impacts.
 - ii. UFP measurement methods are evolving, but are not yet as reliable as methods for measuring criteria pollutants. Variances between side by side monitors are greater than for other standardized measurements, and the equipment can be “temperamental.”
- b. The Air District has already purchased four state of the art particle UFP counters to develop information about sources and baseline concentrations. This will enable the study of factors affecting UFP concentrations and exposure.

ADVISORY COUNCIL RECOMMENDATIONS

The following Advisory Council recommendations to the Board are based on the above presentations and on subsequent discussions among Advisory Council members. The Air District should:

1. Continue development of its UFP activities and their integration with PM_{2.5} efforts (including studies on air monitoring, source emission inventories, air quality modeling, exposure assessment, and health impacts), leading to development of UFP mitigation strategies and recommendations to minimize public exposure.
2. Determine the relative contribution and public health impacts of various sources of UFPs, i.e., vehicles, gross polluter autos, lubricating oil, jet aircraft, outdoor cooking, indoor cooking, and other indoor sources.
3. Continue investigating topics such as the following:

- a. UFP reductions from diesel-engine controls for PM_{2.5}
 - b. Significance of wood smoke and the other Bay Area sources of UFP listed above
 - c. Concentrations of UFPs generally, and the impact of atmospheric conditions
 - d. Interaction of mitigation methods for PM_{2.5} and UFP.
4. Work with CARB and BAR to screen automobiles that burn lubricating oil and raise awareness of the issue (see previous Advisory Council recommendations).
 5. Determine the most effective and energy efficient HVAC filtration systems to mitigate UFP exposure, with a focus on schools, sensitive receptors, commuters, and people living or working near highways.
 6. Integrate the latest information on UFP health effects and behavior-oriented recommendations to reduce exposure into the Air District's Public Education and Outreach efforts. Concepts for integration may include awareness that:
 - a. Proximity to source is a key issue. Highest exposures occur while on or near high traffic flow roadways.
 - b. If living or working near a major outdoor UFP source, keep windows and doors closed when possible.
 - c. High exposures occur while driving. Use cabin air recirculation, change cabin filters regularly, and avoid following high emitting (smoking) vehicles.
 - d. Barbecuing and broiling food is a source of UFPs, and so: open window or turn on the fan while broiling, avoid smoke from barbecues, and avoid self-cleaning ovens (or ventilate well).
 - e. One should minimize time spent in confined garages and near wood fires (indoors and outdoors).
 - f. Advice should be provided to outdoor enthusiasts, such as bikers and joggers.
 - g. Wood-burning is a personal/family health issue (indoors and outdoors), rather than just an environmental issue.

GLOSSARY

AAQS: Ambient Air Quality Standard

ACES: Advance Collaborative Emissions Study

AQMD: Air Quality Management District

AQMP: Air Quality Management Plan

BAR: Bureau of Automotive Repair

Gross polluters: Vehicles with visible emissions or emissions that exceed CARB or BAR standards

HEPA: High-Efficiency Particulate Arresting

HVAC: Heating, Ventilation, and Air-Conditioning

Micrometer, or micron: One millionth of a meter; used as measure of particle diameter

NIST – National Institute of Standards and Technology

nm: nanometer: One billionth of a meter; used as measure of particle diameter

PM: Particulate matter, typically PM smaller than 10 or 2.5 microns; largest PM_{2.5} is 25 times larger than diameter of the largest UFP

UFP: Ultra Fine Particulate, smaller than 100 nm

AGENDA: 6B

REPORT ON THE MAY 9, 2012 ADVISORY COUNCIL MEETING ON ULTRAFINE PARTICLES: EXPOSURE ASSESSMENT

SUMMARY

The following presentations were made at the May 9, 2012 Advisory Council meeting on Ultrafine Particles: Exposure Assessment:

1. Indoor Exposure to Particles from Cooking, Cleaning and Smoking by Lynn M. Hildemann, Ph.D. Dr. Hildemann is an Associate Professor at Stanford University in the Environmental Engineering and Science Program of the Department of Civil and Environmental Engineering Department. Professor Hildemann's research interests include atmospheric chemistry, characterization of source emissions, dispersion modeling, and indoor air pollutants. She is currently studying the sources, chemistry and fate of organic pollutants, with a focus on aerosols. Major areas of research include investigating the sources and size distributions of indoor particulate matter (including allergens), and characterizing the uptake of water by organic aerosols. She has published more than 30 articles on her research.
2. Toward Understanding Ultrafine Particle Exposures in Indoor Environments by William W. Nazaroff, Ph.D. Dr. Nazaroff is a Professor of Engineering in the Department of Civil and Environmental Engineering at the University of California, Berkeley. Professor Nazaroff's research group studies the physics and chemistry of air pollutants in proximity to people, especially in indoor environments, in the domain of exposure science, stressing the development and application of methods to better understand mechanistically the relationship between emission sources and human exposure to pollutants. Professor Nazaroff presently serves as editor-in-chief of Indoor Air, president of the American Association for Aerosol Research (AAAR), president of the Academy of Fellows in the International Society of Indoor Air Quality and Climate (ISIAQ), and member of the California Environmental Protection Agency's Scientific Review Panel on Toxic Air Contaminants. He has published 130+ articles on his research.

KEY POINTS

As was pointed out by the speakers, the studies summarized herein represent small convenience samples. Until confirmation studies are conducted, broad extrapolation is not warranted. Additionally, the studies did not follow occupants in their activities outside of the home or school, so it is not possible to know how in-home or in-school exposures compared to exposure levels in other locations throughout the rest of a typical day (including in transit or outdoors).

Dr. Lynn M. Hildemann

- Dr. Hildemann presented study results on three aspects of indoor air quality that she posed as the greatest exposure risks related to indoor Ultrafine Particles (UFPs; See Glossary for all acronyms): use of scented cleaning products, presence of combustion sources, and proximity of human receptors to sources.
- “Ingredients” for high UFP exposures include: Presence of gaseous pollutants (from combustion or chemical reactions) likely to condense, low ambient PM_{2.5} concentrations (so gases will form UFP rather than condensing onto larger PM), and fresh UFP emissions that have not yet coagulated (i.e., combined to form larger particles).
- Scented cleaning products: Products containing citrus-scented limonene or other terpenes (often pine-scented) can chemically react in the presence of moderate ozone levels (from outdoors) to form UFP. If used, these products should be limited to off- peak (morning or evening) ozone periods, and windows should be opened and rooms vacated afterwards.
- Indoor combustion sources include clothes dryers, cigarette smoking, and cooking:
 - Clothes dryers can contribute to indoor UFP levels due to imperfect venting, especially at startup. Elevated UFP levels can persist for a couple hours.
 - In one study of casino air quality, UFP particle number concentrations were more than three times greater in indoor smoking areas than outdoors. UFP concentrations in nonsmoking indoor areas varied greatly, based on the extent to which the location was influenced by outdoor air or drift from adjoining rooms.
 - Cooking various foods on an electric cooktop, UFP number concentrations were detected at levels up to 10 times greater than the ambient indoor air. UFP emissions from some foods were comparable to emissions from cigarette smoking. The warm cooktop itself generated initial UFP levels almost as high as from the food. In the absence of a range hood vented to the outdoors, elevated UFP levels from food persisted for an hour or more.
- UFP exposure levels are generally correlated with proximity to source, but micro environmental factors can influence exposure levels:
 - Air circulation patterns in an indoor environment affect dilution levels and can have a greater effect than distance. (For example, a nonsmoker can have nearly the same exposure as a smoker, depending on position and air circulation.) Mechanical ventilation systems generally tend to more effectively promote vertical mixing and dilution of indoor air than simply opening windows.

- In two exploratory outdoor studies comparing cigarette smoke exposure to motor vehicle emission exposure, subjects on the sidewalk of an arterial road within 1.5 m of a smoker were exposed to high UFP levels while a cigarette was smoked. Along roadways with fewer heavy-duty trucks, UFP exposure from nearby cigarette smoke was much greater than UFP exposure from traffic. However, traffic-related UFP along roadways with a high proportion of heavy-duty vehicles generated UFP levels of similar magnitude as UFP from cigarette smoke. These results illustrate the potential importance of UFP exposure from both secondhand smoke and roadways.

Dr. William W. Nazaroff

- Dr. Nazaroff presented results of two studies that characterized indoor UFP and co-pollutant levels in a small number of typical East Bay houses and schools.
- Studies involved monitoring and occupant surveys to characterize indoor air quality and also to quantify exposure of occupants, based on time and duration of occupancy.
- Study in seven non-smoking houses:
 - A variety of indoor sources contributed to UFP levels, with both gas and electric cooking appliances (stoves and ovens) contributing UFPs in all cases. Other sources (though not contributing in all cases) included gas clothes dryers, gas furnaces, toasters or toaster ovens, irons, and candles.
 - Approximately half the UFPs contained in outdoor air infiltrated into the homes. Over the course of the day and night, these outdoor-origin particles contributed ~30% of the average resident's indoor exposure to UFPs, with the remaining 70% of daily indoor UFP exposure associated with indoor sources. The majority of these indoor sources were associated with peak events that occurred when the residents were home and awake (i.e., cooking or other activities under their control).
 - In some cases particle counts were actually higher upstairs, away from UFP sources, because warm air rises, carrying UFPs with it.
- Study in six classrooms in four schools:
 - Compared to homes, which have more indoor sources of UFP, there was not as strong a correlation of indoor occupancy to high UFP exposure (exceptions: cooking activity in classrooms and custodial activities).
 - During outdoor peak UFP periods, particle counts within classrooms were somewhat lower than outdoors. However, UFP counts in the classroom during occupied periods generally fluctuated along with outdoor UFP counts, because classroom windows tended to be open when the rooms were occupied.

- When doors were closed and HVAC off, an average of 38% (ranging from 16% to 51%) of the UFPs contained in outdoor air infiltrated into the classroom. When doors/windows were open and/or HVAC on, an average of 60% (ranging from 51% to 76%) of the UFPs contained in outdoor air infiltrated into the classroom.
- Other air quality issues exist at schools besides PM counts, but this study suggests an opportunity for effective air filtration and ventilation techniques, as well as for greater attention to custodial practices, to help improve air for children and staff at school. A more detailed cost-effectiveness evaluation of air filtration should be performed.

EMERGING ISSUES FROM THE ADVISORY COUNCIL

1. Dr. Hildemann and Dr. Nazaroff agreed that much of a typical person's total UFP exposure occurs indoors, since indoor concentrations of UFP in residential settings can in some cases be significantly higher than outdoors, and the average Californian spends approximately 90% of their time indoors.
2. The apportionment of indoor and outdoor sources of indoor UFPs can be highly variable, depending on factors such as location, building type, building ventilation system, and occupant behavior. A need exists to better understand the relative contribution of indoor and outdoor UFP sources to indoor UFP levels.
3. Similar to UFPs in outdoor environments, indoor UFPs can exhibit high spatial and temporal variability due to micro environmental factors, presenting challenges to the use of traditional measurement techniques.
4. Not all UFPs have equal health impacts. Although the science is still evolving and there is not yet enough data, it has been suggested, for example, that insoluble UFPs may be a greater health concern than highly soluble UFPs.
5. Despite these uncertainties, and although we can not totally eliminate UFP exposure, it is possible to mitigate exposure from both indoor and outdoor sources through a combination of source reduction, managing proximity to sources, and effective ventilation and air filtration to reduce both ambient and episodic UFP levels. Additional information is needed regarding effective mitigation techniques, including ventilation and filtration.

ADVISORY COUNCIL RECOMMENDATIONS

The following Advisory Council recommendations to the Board are based on the above presentations and subsequent discussions among Advisory Council members. The Air District should:

1. Encourage further research on indoor UFP exposures, health effects, and the interaction of indoor and outdoor UFP sources that considers issues, such as:

- a. Better define health impacts and relative risks from different types of UFPs, as well as from different exposure levels (e.g., episodic exposures vs. average exposures).
 - b. Use of a total exposure methodology (considering duration and peak levels of exposure) can help identify priorities for mitigation and public education, and help integrate research on indoor UFP exposure with research on outdoor UFP exposure. Attention should be given to existing research on occupational exposures (e.g., cleaning products) and cumulative exposure to secondhand smoke, as well as to exposure expected from different types of commute patterns (car, bike, mass transit).
 - c. Assess variations in UFP concentration and type from seasonal air quality impacts associated with ozone and smoke (e.g., fireplaces, wood stoves, campfires, charcoal grills) and their effect on indoor UFP exposures.
2. Encourage regional partners to determine ventilation and filtration methods most effective at removing UFPs in different building types, while also being energy efficient and cost effective in the range of Bay Area climates.
 - a. The Air District should share findings with regional planning and public health departments to provide uniform guidance so that those involved with designing, building, and maintaining buildings are aware of best practices in reducing occupant exposure to UFPs (through ventilation, effective filtration, building siting and landscape design, custodial practices, etc.).
 - b. Prioritize adoption of best practices for ventilation and filtration in schools.
3. Integrate information on indoor UFP exposure into existing Public Education and Outreach efforts. Concepts for integration may include awareness about individuals' ability to reduce UFP levels in the home, as well as the potential to reduce or mitigate exposures in schools, workplaces, and outdoors:
 - a. Limonene or other terpene cleaning products (e.g., citrus and pine scented products) can react with ozone in the air to form UFPs as well as formaldehyde, and are themselves respiratory irritants. Encourage building owners and employers to switch to unscented and safer cleaning products. Urge those with any degree of respiratory impairment to avoid use of cleaning products and air fresheners with these scenting agents. Educate the public and those with occupational exposures (including domestic workers) about these products and their proper use. Avoid using these products mid-day or other times when ozone levels are high, but be aware that even moderate ozone levels can cause these chemical reactions.
 - b. Build on existing awareness about the health effects of cigarette smoke to give advice about good cooking and ventilation practices: Turn on the

ventilation hood when the stove or oven are in use. Limit the time that those with asthma, lung, or heart disease spend in kitchen while cooking, and ventilate and vacate kitchen for a while after cooking. Encourage adoption of quieter stove hood fans and avoid use of recirculating fans. Educate the public about high UFP levels from stoves or ovens containing pilot lights or self-cleaning features.

- c. Secondhand smoke can contribute significantly to indoor or outdoor UFP concentrations. Living with a smoker can expose one to levels of $PM_{2.5}$ that exceed AAQS.
4. Continue to integrate knowledge of indoor and outdoor UFP exposure and health effects into the Air District's existing PM program.

GLOSSARY

AAQS: Ambient Air Quality Standard

HVAC: Heating, Ventilation, and Air-Conditioning

Micrometer, or micron: One millionth of a meter; used as measure of particle diameter

nm: nanometer: One billionth of a meter; used as measure of particle diameter; generally 1-5 atomic diameters

PM: Particulate matter, typically PM smaller than 10 or 2.5 microns; largest $PM_{2.5}$ is 25 times larger than diameter of largest UFP

UFP: Ultra Fine Particulate, smaller than 100 nm (or 0.1 micron)

**FINAL REPORT ON THE SEPTEMBER 12, 2012 ADVISORY COUNCIL MEETING
ON ULTRAFINE PARTICLES: EXPOSURE REDUCTION**

SUMMARY

The following presentations were made at the September 12, 2012 Advisory Council meeting on Ultrafine Particles: Exposure Reduction:

1. Exposure to Ultrafine Particles on and Near Roadways by Yifang Zhu, Ph.D. Professor Zhu is currently an Associate Professor at the University of California, Los Angeles in the Environmental Health Sciences Department in the Fielding School of Public Health. Prior to that, she worked as an Assistant Professor in the Environmental Engineering Department at Texas A&M-Kingsville. Her research focuses primarily in the field of environmental exposure assessment and aerosol science and technology. Specifically, she is interested in determining the data necessary to fill the knowledge gap in quantitative exposure/risk assessments on vehicular emitted ultrafine particles that have shown higher toxicity than larger particles on a unit mass basis. Her current research focuses on identifying key factors that affect human exposure to ultrafine particles on and near roadways by measuring and modeling their emissions, transport, and transformation in the atmosphere as well as into the in-cabin and indoor environments. These research efforts are supported by two prestigious national awards, the National Science Foundation Faculty Early Career Development (CAREER) Award and the Walter Rosenblith New Investigator Award from the Health Effects Institute.
2. Policy Strategies to Reduce Health Effects from Particulates by Rajiv Bhatia, MD, MPH. Dr. Bhatia is the Director of Occupational and Environmental Health for the San Francisco Department of Public Health and an Assistant Clinical Professor of Medicine at the University of California San Francisco. He has been responsible for environmental health law and policy in San Francisco since 1998 and has broadened the scope of local environmental health to include issues of labor rights, working conditions, housing, land use, transportation, injury prevention, and food security. He has pioneered the practice of health impact assessment (HIA) in the US, institutionalizing a HIA unit in San Francisco government, teaching the first US graduate course on HIA at the University of California at Berkeley, and co-founding Human Impact Partners, a non-profit organization working nationally to build the field. He is a founding member of the Health and Social Justice Team for the National Association of County and City Health Officials and the co-editor of *Tackling Health Inequities through Public Health Practice: Theory to Action*. Dr. Bhatia earned a MD from Stanford University in 1989.

KEY POINTS

Yifang Zhu, Ph.D. - "Exposure to Ultrafine Particles on and Near Roadways"

Dr. Zhu reiterated the following points that have been previously presented to the Advisory Council:

1. Most ultrafine particle (UFP) deposition occurs in the deep-lung alveolar (gas-blood interface) region. Deposited UFP can result in alveolar inflammation and, because of their small size and ability to cross membranes, UFP can migrate from the lung and nasal passages to the heart, brain, and other areas of the body.
2. Recent studies have examined the air pollution health effects of ultrafine particles (UFP) related to exposures near heavily trafficked roadways, and these health effects have included cardiac and pulmonary health risks, adverse effects on children's lung development, decreased lung function in adult asthmatics, and autism incidence.
3. Compared to PM10 and PM2.5, the UFP fraction has relatively higher particle numbers, but lower mass.
4. Vehicle emissions usually constitute the most significant source of primary UFPs in an urban environment.

Dr. Zhu also reported:

1. UFP numbers measured at two monitoring locations in the Los Angeles (LA) area were highest during commute periods, consistent with vehicle emissions as a major contributor. Also consistent with vehicle emissions as a major UFP contributor, particle numbers in the air over an LA freeway were measured at nearly seven times higher than background, while particle mass increased only about 10 percent.
2. UFP numbers decayed exponentially with distance downwind of two LA freeways, dropping by nearly an order of magnitude within 100 meters of the roadway; this is a faster reduction than what occurs with gaseous emissions. Elevated UFP numbers downwind of one freeway in LA persisted during the night at a distance of up to a mile, a greater distance than during the day. It is important to note that shifts in wind speed and direction can affect and even reverse UFP concentrations on either side of a roadway.
3. Higher UFP numbers were measured on a freeway (I-710) more heavily travelled by heavy-duty diesel trucks than on another freeway (I-405) with less such traffic, indicating diesel trucks as a significant contributor to UFP. However, UFP was measured at significant levels along both freeways, not just those with diesels. Thus gasoline engines also contribute to UFP emissions.
4. Significant numbers of UFP can penetrate indoors into residences near roadways. This can be a significant contributor to UFP exposure for residents, given that people spend more than

80% (and often more than 90%) of their time indoors. Of note, UFPs –50 to 100 nanometers (nm) in size penetrate indoors more easily than those that are less than 50 nm.

5. In-vehicle cab recirculation using a filter reduced UFP exposure measured in three different makes/models of vehicles to between 5% and 40% of UFP levels in outside air. The degree of UFP reduction depends on age and model/make of vehicle and such factors as cabin tightness and type of filter, which can influence outdoor air penetration, deposition efficiency, and degree of filtration. However, with reduced air penetration while air is recirculating, carbon dioxide (CO₂) levels can build up inside the car significantly, creating a secondary concern.
6. Using a mathematical model, in-cabin ventilation measures, including recirculating cabin air (RC) and a fan, were calculated to affect in-cabin UFP exposure while in a new and tight vehicle as follows:
 - a) Fan off and RC off: ~40% of outdoor on-roadway levels.
 - b) Fan on and RC off: ~20% of outdoor on-roadway levels.
 - c) Fan on and RC on: <10% of outdoor on-roadway levels (i.e., this combination affords the greatest protection).
7. Future advances in in-cabin filtration technology have significant potential to reduce commuters' exposure to ultrafine particles while at the same time solving the CO₂ build-up problem. HEPA filters provide the greatest protection, though stand-alone air purifiers can also significantly reduce PM_{2.5} and UFP levels inside vehicles, as has been done in school buses.
8. 2011 data show that UFP concentrations on and near the freeways tested have decreased with low sulfur fuel, exhaust catalytic converters, diesel particulate filters, removal of clunkers (high emitters), and other modern technological changes.
9. Factors that can reduce UFP exposure near roadways include:
 - a) Meteorological: Staying on the upwind side of major roadways or 100+ m downwind
 - b) Spatial: Staying away from major roadways
 - c) Temporal: Avoiding roadways during heavy traffic hours.
10. Factors that can reduce UFP exposure inside vehicles include:
 - a) Route-related: Avoiding driving on heavy-duty vehicle routes
 - b) Driving-related: Avoiding idling (this includes turning off bus engines at transfer points)
 - c) In-cabin ventilation usage: Closing windows and turning on recirculation and fan
 - d) In-cabin filtration usage: Using HEPA filters/air purifiers.

Rajiv Bhatia, MD, MPH – “Policy Strategies to Reduce Health Impacts from Urban Particulate Pollution”

1. Regional monitors are not adequate for assessing localized exposure levels in close proximity to significant local sources, such as freeways, and do not provide adequate data for policies directed at such exposures. Europe has been doing localized monitoring for some time. There is a priority need for neighborhood scale air pollution monitors and models.
2. For a variety of reasons, infill growth has been concentrated near eastern San Francisco (SF) freeways. SF is a leader in air pollution exposure assessment and mitigation. To guide policy, the city has developed maps showing model-estimated traffic-related PM 2.5 concentrations along roadways. These maps are useful in determining where PM2.5 exposure reduction measures are required for new development projects and have been extremely helpful in building public support for policies to mitigate emissions and exposures.
3. Compared to many areas around the state, San Francisco has good overall air quality. All areas of San Francisco meet both federal and state annual PM2.5 standards, and few areas of SF have PM2.5 levels higher than 10 ug/m³ (the state annual standard is 12 ug/m³ and the federal annual standard is 15 ug/m³). Background levels in SF are approximately 8 ug/m³. SFDPH has estimated there are 103 annual premature deaths due to exposures in areas with annual PM2.5 levels at or above 8 ug/m³. This illustrates the value of continued PM2.5 exposure reductions, even when clean air standards are met.
4. Local strategies to reduce PM exposure could include:
 - a) Emission reductions (e.g., reducing growth of traffic density through measures such as land use zoning, congestion pricing, parking control, impact fees, improved transit, improved bicycle and pedestrian environments)
 - b) Exposure management (e.g., enhanced ventilation systems for new residences in areas with high particulate levels or cancer risks; improving ventilation in existing residential dwellings).
5. To reduce indoor exposures to urban air pollution in infill areas, SF developed [Health Code Article 38](#) for new residential development in areas in proximity to freeways and major roadways. Under the requirements of this article, dwelling units proposed to be located within a potential roadway exposure zone at a location having PM2.5 greater than 0.2 ug/m³ attributable to local roadway traffic sources have to install a ventilation system capable of removing at least 80 percent of ambient PM2.5 from habitable areas. It is important to note, however, that this regulation applies to new construction, and does not protect existing residential or other uses in such areas.
6. A number of thoughts for regional air pollution policy were listed, including:
 - a) Regulation of traffic corridors as emissions sources (e.g., limits on highway capacity expansion, urban freeway speed and flow control).
 - b) Identification and prevention of local air pollution use conflicts (e.g., commercial exhausts)
 - c) Regionalization of local best practices (e.g., instituting ventilation upgrades to accompany weatherization work, prioritizing near-roadway areas).

7. Because more mid to upper income residents are choosing to move into infill areas with higher levels of PM, air pollution exposure disparity by income levels is decreasing.
8. Both noise and pollution emission levels increase with traffic. Noise control ordinances and other building code laws can be used as an administrative example for addressing indoor air quality via an air pollution exposure reduction ordinance (i.e., by requiring mitigation via building design when pollution exceeds a certain level).
9. Air quality solutions can be integrated into existing programs and regulations to produce desired co-benefits (i.e., some technologies that protect interior noise levels may also work to reduce interior air pollutants; programs that target energy efficiency/home weatherization can be expanded to include concepts of ventilation and air filtration).

EMERGING ISSUES

The Advisory Council has identified the following emerging issues:

1. Proximity to traffic and vehicle emissions are keys to UFP exposure. There is a need to better understand the relative effectiveness of, and interaction between, various strategies to reduce UFP and other sources of air pollution. In doing so, there is a need to recognize the following hierarchy of exposure reduction mechanisms, with the higher-tier ones, though often harder to implement, more effective and able to protect a larger proportion of the population:
 - a) Reduce sources (such as reducing the number of vehicle miles traveled, as well as high emitting vehicles; incentivize more user-friendly bicycle and pedestrian environments)
 - b) Replace or substitute (such as increasing the number of electric or alternative fuel vehicles)
 - c) Engineering controls (such as utilizing lower-emitting vehicles; developing more effective in-cabin filters; improving building ventilation near roadways)
 - d) Administrative (such as reducing/enforcing speed limits; utilizing congestion pricing; instituting parking controls; changing land use zoning; improving incentives for biking, walking and public transportation; locating residential development further from busy roadways; mitigating traffic emissions)
 - e) Personal behavior (such as utilizing more effective in-cabin ventilation practices, lowering driving speeds, altering travel routes and trip timing; expanding use of public transit).
2. There is a need to better understand the range of measures available to reduce UFP and PM_{2.5} and their co-benefits (e.g., reducing traffic speed to 50 MPH may have a significant and immediate impact on reducing greenhouse gases, UFP, and other air pollutants, with reductions in noise, injuries and fatalities as co-benefits). Technologies that result in air pollution exposure reduction that also have positive co-benefits also should be pursued.
3. It will be important to craft effective public education messages that help the public understand how to reduce UFP exposure, especially for neighborhoods, sports fields and playgrounds closest to freeways, while commuting, and for age or occupation groups expected to have higher UFP exposures (e.g., cyclists, pedestrians and those in near-roadway occupations).
4. There is a need to consider source and receptor siting criteria that better take into account local conditions to most effectively reduce UFP exposure. Neighborhood scale exposure models coupled with monitoring could assist local governments in identifying locations where resources should be expended to reduce emissions and/or exposures most effectively (e.g., in determining areas to site new sources or receptors, as well as areas of existing sources and receptors that need attention).
5. There is a need to develop measures to reduce UFP exposures while driving. This is expected to include enhanced vehicle cabin recirculation and filtration. There is a wide

range of filter efficiencies for in-cabin filters, and none approach HEPA level efficiencies.

6. There is a need for state/regional agencies to further develop model policies for UFP exposure and disseminate them to local governments. San Francisco leads in modeling at the neighborhood level and in establishing building code standards to minimize air pollution exposures (e.g., enhanced ventilation systems for new residences with higher fine particulate levels or cancer risks). There are approximately 100 cities and 9 counties within the BAAQMD jurisdiction that do not have any such mechanisms in place.
7. Regional monitors are not adequate to assess localized exposure levels in close proximity to significant local sources, such as freeways and do not provide adequate data for policies directed at such exposures. Europe has been doing localized monitoring for some time. There is a priority need for neighborhood scale air pollution models.
8. Energy efficiency programs to weatherize existing housing stock could be expanded to help ensure that ventilation systems are also improved as air penetration is tightened.
9. Noise control codes for new construction can be a model for crafting code-related strategies to reduce indoor air quality exposures.

RECOMMENDATIONS

The Advisory Council recommends that the Air District:

1. Continue planning to integrate UFP into its efforts to reduce PM exposure.
2. Continue to follow the development of, and incorporate into the District's existing multi-pollutant approach to air quality planning, emerging methods for analyzing UFP exposures, health risks, and mitigation.
3. Continue to consider the hierarchy of exposure reduction mechanisms in developing measures to reduce exposure to PM and other air pollutants.
4. Continue efforts to develop suitable tools to model UFP air quality impacts at a neighborhood and regional level and the development and refinement of a UFP emission inventory. UFP modeling should be validated with monitoring data.
5. Integrate UFP monitoring with required NO₂ roadside monitoring. Consider supplementing the District's regional monitoring network with localized monitoring to gain a better understanding of UFP exposures in varying traffic and neighborhood environments.
6. Work with other agencies to encourage development of standards and incorporation of measures to reduce UFP and other air pollutant exposures in vehicles (e.g., in-cabin vehicle filtration and recirculation systems). Educate the public regarding the use of such measures.
7. Provide guidance to regional and local agencies, particularly those with land use authority, on systematic approaches for evaluating and reducing exposures to UFP and other air pollutants in both outdoor air and indoor spaces, and develop model policies and regulations to address PM_{2.5}, UFP and other air pollutant exposures (e.g., criteria/guidelines for siting sensitive land uses and/or technological solutions for improving indoor air quality in both new and existing buildings; education programs that provide information on reducing personal exposure to UFP and to support existing strategies to reduce PM_{2.5} and other pollutants).
8. Present material to the Advisory Council on the state of the science of cumulative impacts analyses.
9. Consider developing, or offer a prize for developing, a District smart-phone and/or iPad app that can improve public understanding of the dangers of air pollution and provide information about current air quality, Spare-the-Air alerts, personal actions that could be taken, news and events, alternative fueling station locations, calculation of carbon footprints, smoking vehicle complaints, and other useful information.
10. Work jointly with the Advisory Council to identify and implement means for the Council to support the efforts of the District's Health and Science Officer.

GLOSSARY

CO₂ – Carbon Dioxide

HEPA – High Efficiency Particulate Air

NO₂ – Nitrogen Dioxide

nm – Nanometer (one billionth of a meter)

PM – Particulate Matter

RC – Recirculate

UFP – Ultrafine Particulates

SFDPH – San Francisco Department of Public Health

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 21, 2012

Re: 390 Main Street, Regional Agency Headquarters Conceptual Design
Presentation and Building Tour

RECOMMENDED ACTION:

None; receive and file.

BACKGROUND

At their Special Board of Directors meeting on July 30, 2012, the Board received a presentation on conceptual design plans for the renovation of 390 Main Street. The presentation included a summary of the pre-design process; a review of the exterior design, interior floor plans, design elements to enhance interagency cooperation; the incorporation of sustainability-focused design concepts; and next steps.

DISCUSSION:

Since July 30, Air District staff and partner agencies in the Regional Agency Headquarters project, have finalized agency programming and conceptual schematic design plans for the redevelopment of 390 Main Street. Revisions to agency programming and design plans include accommodations for the Association of Bay Area Government (ABAG). At their meeting of September 27, 2012, the ABAG Executive Board voted to adopt a policy, subject to successful negotiations of terms and conditions, for relocating to 390 Main Street.

At the December 5, 2012 meeting, staff of Perkins + Will, the project's architectural and engineering firm, will present the revised and updated conceptual design plans and lead a walking tour of the building to highlight major features of the renovation program.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

Lease with option to Purchase was signed April 2012.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mary Ann Okpalauugo
Approved by: Jack M. Colbourn

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John Gioia and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: November 20, 2012

Re: Status Report on Implementation of Work Plan for Action Items Related to
Accidental Releases from Industrial Facilities

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

On August 6, 2012, a substantial fire resulted from a hydrocarbon leak at the Crude Unit #4 at the Chevron Richmond Refinery. The fire resulted in a large plume of black smoke at the Crude Unit and continuous visible emissions from a nearby flare. The Contra Costa County Health Department issued a community warning and ordered a shelter-in-place that lasted for approximately five hours in Richmond, San Pablo and North Richmond.

At the September 10, 2012 Special Meeting of the Board of Directors, Air District staff provided a summary of the Air District's response to the August 6, 2012 Chevron Richmond Refinery incident. Staff from Contra Costa County and the U.S. Chemical Safety Board also provided summaries of their agency's response to the incident.

At the October 17, 2012 meeting of the Board of Directors, the Board approved staff's *Work Plan for Action Items Related to Accidental Releases from Industrial Facilities* (Work Plan) that included seven key actions:

1. Continue the investigation of the Chevron Richmond Refinery incident, in coordination with other agencies involved, into violations of applicable air quality requirements in order to take appropriate enforcement action;
2. Review and update the Air District's incident response procedures;
3. Evaluate enhancements to the Air District's air quality monitoring capabilities, including convening experts to provide input on monitoring options;
4. Expedite development of a rule that would track air emissions at refineries over time, require mitigation of any significant increases in emissions that may occur, and require additional community air monitoring at refineries;

5. Evaluate enhancements to community outreach during and after incidents to provide additional services to the public;
6. Sponsor legislation that would provide the Air District with the authority to collect more substantial penalties that would provide industry with additional incentives to take proactive measures to avoid accidental releases; and
7. Evaluate the Air District's needed incident response resources, and develop amendments to the Air District's fee regulation to recover the costs of these resources.

DISCUSSION

At the December 5, 2012 Special Board of Directors meeting, Air District staff will provide the Board with an update on implementation of the Work Plan.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Air District staff is developing amendments to Regulation 3: Fees to recover costs associated with the Work Plan.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jean Roggenkamp