



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

BOARD OF DIRECTORS  
SPECIAL MEETING  
JUNE 2, 2010

A meeting of the Bay Area Air Quality Management District Board of Directors will be held at 9:45 a.m. in the City of San Jose Council Chambers, 200 East Santa Clara Street, San Jose, California.

**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.

# BOARD OF DIRECTORS SPECIAL MEETING A G E N D A

WEDNESDAY  
JUNE 2, 2010  
9:45 A.M.

CITY OF SAN JOSE COUNCIL CHAMBERS  
200 EAST SANTA CLARA STREET  
SAN JOSE, CA 95113

## CALL TO ORDER

Opening Comments  
Roll Call  
Pledge of Allegiance

Chairperson, Brad Wagenknecht  
Clerk of the Boards

## PUBLIC COMMENT PERIOD

**Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3**  
*Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 939 Ellis Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Board's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.*

## 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)*

## CONSENT CALENDAR (ITEMS 1 – 4)

Staff/Phone (415) 749-

1. Minutes of May 5, 2010

L. Harper/5073

[lharp@baaqmd.gov](mailto:lharp@baaqmd.gov)

2. Communications

J. Broadbent/5052

[jbroadbent@baaqmd.gov](mailto:jbroadbent@baaqmd.gov)

*Information only.*

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

J. Broadbent/5052

[jbroadbent@baaqmd.gov](mailto:jbroadbent@baaqmd.gov)

*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 attached memoranda lists District personnel who traveled on out-of-state business.*

4. Consideration of Authorization for Execution of Purchase Order in Excess of \$70,000 Pursuant to Administrative Code Division II Fiscal Policies and Procedures Section 4.3 Contract Limitations  
**J. Roggenkamp/4646**  
[jroggenkamp@baaqmd.gov](mailto:jroggenkamp@baaqmd.gov)

*The Board of Directors will consider authorizing the Executive Officer/APCO to execute a purchase order to ThermoFisher Scientific in an amount not to exceed \$190,935 for air monitoring instruments.*

### **COMMITTEE REPORTS AND RECOMMENDATIONS**

5. Report of the **Stationary Source Committee** Meeting of May 13, 2010  
**CHAIR: G. UILKEMA**  
**J. Broadbent/5052**  
[jbroadbent@baaqmd.gov](mailto:jbroadbent@baaqmd.gov)
6. Report of the **Climate Protection Committee** Meeting on May 19, 2010  
**CHAIR: P. TORLIATT**  
**J. Broadbent/5052**  
[jbroadbent@baaqmd.gov](mailto:jbroadbent@baaqmd.gov)

*The Committee recommends Board of Directors' approval of up to \$4.4 million for a Greenhouse Gas Reduction Grant Program (GGRGP) and authorization for the Executive Officer/APCO to execute Grant Agreements for the recommended projects and contingencies to expend this funding.*

7. Report of the **Executive Committee** Meeting on May 24, 2010  
**CHAIR: B. WAGENKNECHT**  
**J. Broadbent/5052**  
[jbroadbent@baaqmd.gov](mailto:jbroadbent@baaqmd.gov)

*The Committee recommends Board of Directors' approval of the following items:*

- A) *Establishing a Strategic Facilities Planning Ad Hoc Committee; and*
- B) *Selection of Sonoma Technologies, Inc. (STI) to assist with the development of local emissions inventories to support Community Risk Reduction Plans (CRRPs) and authorize the Executive Officer/APCO to execute a contract with STI not to exceed \$207,200.*

8. Report of the **Mobile Source Committee** Meeting of May 27, 2010  
**CHAIR: S. HAGGERTY**  
**J. Broadbent/5052**  
[jbroadbent@baaqmd.gov](mailto:jbroadbent@baaqmd.gov)

*The Committee recommends Board of Directors' approval of the following items:*

- A) *Projects with Proposed Grant Awards Over \$100,000:*
  - 1. *Approve Transportation Fund for Clean Air (TFCA) Fiscal Year (FY) 2009/2010 projects with proposed grant awards over \$100,000 listed on Attachment 1; and*
  - 2. *Authorize the Executive Officer/APCO to enter into agreements for the recommended TFCA FY 2009/2010 projects.*

B) Transportation Fund for Clean Air (TFCA) County Program Manager Expenditure Plans for Fiscal Year (FY) 2010/2011:

1. Approve the allocation of FY 2010/2011 TFCA County Program Manager Funds listed on Table 1; and
2. Authorize the Executive Officer/APCO to enter into funding agreements with the County Program Managers for the total funds to be programmed in FY 2010/2011, listed on Table 1, consistent with the Board-adopted TFCA Program Manager Fund Policies.

C) Transportation Fund for Clean Air (TFCA) Regional Fund Policies and Evaluation Criteria for Fiscal Year (FY) 2010/2011 and Proposed Allocations for Specific Project Types:

1. Approve the proposed FY 2010/2011 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A; and
2. Approve the TFCA Regional Fund set-asides listed below. Any monies not spent in these categories within 12 months will revert back to the TFCA Regional Fund for re-allocation:
  - a. Up to \$4 million for shuttles and rideshare projects; and
  - b. Up to \$600,000 for bicycle facility projects.

D) Board Resolution in support of an application for California Goods Movement Bond Funding:

1. Adopt a Resolution in support of the Air District's application for Goods Movement Bond funding.

**PUBLIC HEARING(S)**

9. Public Hearing to Consider Adoption of Proposed Amendments to the District's California Environmental Quality Act (CEQA) Thresholds of Significance

H. Hilken/4642  
[hhilken@baaqmd.gov](mailto:hhilken@baaqmd.gov)

*CEQA Thresholds of Significance are developed to assist local jurisdictions and agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality. The thresholds provide a means to identify proposed local plans and development projects that may have a significant adverse effect on air quality, public health, attainment of state and national ambient air quality standards, and to provide recommendations to mitigate those impacts. The proposed amendments to the Thresholds of Significance include staff-recommended thresholds for construction, operational-related, and plan-level emissions of criteria air pollutants and ozone precursors, greenhouse gases, toxic air contaminants, and odors.*

## **CLOSED SESSION**

### **10. 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):*

- A) Andrea Gordon v. Bay Area AQMD, United States District Court, N.D. Cal., Case No. CV 08-8630 BZ
  
- B) United States and Communities for a Better Environment v. Pacific Gas and Electric Company, et al., United States District Court, N.D. Cal., Case No. C-09-4503 SI

## **OPEN SESSION**

## **OTHER BUSINESS**

- 11. Report of the Executive Officer/APCO
  
- 12. Chairperson's Report
  
- 13. Time and Place of Next Meeting – 9:45 A.M. Wednesday, June 16, 2010 – 939 Ellis Street, San Francisco, CA 94109
  
- 14. Adjournment

**CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109**

**(415) 749-5130**  
**FAX: (415) 928-8560**  
**BAAQMD homepage:**  
[www.baaqmd.gov](http://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](http://www.baaqmd.gov)) at that time.

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**  
**939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109**  
**(415) 771-6000**

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

**JUNE 2010**

<b><u>TYPE OF MEETING</u></b>	<b><u>DAY</u></b>	<b><u>DATE</u></b>	<b><u>TIME</u></b>	<b><u>ROOM</u></b>
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	2	9:45 a.m.	City of San Jose Council Chambers 200 East Santa Clara St. San Jose, CA 95113
<b>Advisory Council Regular Meeting</b>	Wednesday	9	9:00 a.m.	Board Room
<b>Board of Directors Public Outreach Committee</b> <i>(At the Call of the Chair)</i>	Wednesday	9	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
<b>Board of Directors Budget Hearing</b> <i>(At the Call of the Chair)</i>	Wednesday	16	Following Board Meeting	Board Room
<b>Board of Directors Mobile Source Committee</b> <i>(Meets 4<sup>th</sup> Thursday each Month)</i>	Thursday	24	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room

**JULY 2010**

<b><u>TYPE OF MEETING</u></b>	<b><u>DAY</u></b>	<b><u>DATE</u></b>	<b><u>TIME</u></b>	<b><u>ROOM</u></b>
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	7	9:45 a.m.	Board Room
<b>Advisory Council Regular Meeting</b>	Wednesday	14	9:00 a.m.	Board Room
<b>Joint Policy Committee</b>	Friday	16	10:00 a.m.	MTC Auditorium 101 – 8 <sup>th</sup> Street Oakland, CA 94607
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	21	9:45 a.m.	Board Room
<b>Board of Directors Mobile Source Committee</b> <i>(Meets 4<sup>th</sup> Thursday each Month)</i>	Thursday	22	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room
<b>Board of Directors Stationary Source Committee</b> <i>(At the Call of the Chair)</i>	Friday	23	9:30 a.m.	Board Room

## AUGUST 2010

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	4	9:45 a.m.	Board Room
<b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	18	9:45 a.m.	Board Room
<b>Board of Directors Mobile Source Committee</b> <i>(Meets 4<sup>th</sup> Thursday each Month)</i>	Thursday	26	9:30 a.m.	4 <sup>th</sup> Floor Conf. Room

HL – 5/27/10 (8:50 a.m.)  
P/Library/Forms/Calendar/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson, Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 27, 2010

Re: Board of Directors Draft Meeting Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Board of Directors Regular Meeting of May 5, 2010.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Regular Meeting of May 5, 2010.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

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

Board of Directors Regular Meeting  
May 5, 2010

**DRAFT MINUTES**

**CALL TO ORDER:** Chairperson Brad Wagenknecht called the meeting to order at 9:50 a.m.

Roll Call: Chairperson Brad Wagenknecht; Vice Chairperson Tom Bates; Secretary John Gioia, and Directors Chris Daly, Susan Garner, Carole Groom, Scott Haggerty, David Hudson, Jennifer Hosterman, Ash Kalra, Carol Klatt, Eric Mar, Nate Miley, Mark Ross, James Spering, Pamela Torliatt, Gayle B. Uilkema and Ken Yeager

Absent: Directors Harold Brown, Liz Kniss, and Shirlee Zane

**PLEDGE OF ALLEGIANCE:** Chairperson Wagenknecht led the Pledge of Allegiance.

**Public Comments:**

There were no public comments.

**Board Member Comments:**

There were no Board Member comments.

**CONSENT CALENDAR (Items 1-6):**

1. Minutes of April 7, 2010 and Special Meeting of April 14, 2010, as amended.
2. Communications
3. Quarterly Report of Executive Office and Division Activities
4. Quarterly Report of Air Resource Board Representative - Honorable Ken Yeager
5. Consider Establishing New Job Classification of Audit and Special Projects Manager with a Salary Set at Pay Range 148M
6. Consider Reclassifying Positions

Chairperson Wagenknecht announced a minor correction to the bottom of page 1 of the Special Meeting Minutes of April 14, 2010: change the word, "Off-Road" to "On-Road".

**Board Action:** Director Torliatt made a motion to approve Consent Calendar Items 1 through 6; Director Hosterman seconded the motion; carried unanimously without opposition.

**COMMITTEE REPORTS AND RECOMMENDATIONS:**

7. **Report of the Stationary Source Committee Meeting of April 12, 2010**  
Chairperson Uilkema

The Committee met on Monday, April 12, 2010 and due to a lack of a quorum, deferred the minutes of March 5, 2010.

The Committee received a presentation regarding Pacific Steel Casting Company's three plants, discussed plant locations, process operations, air pollutants and emissions from the plants, the Odor Management Plan, and a complaint history of all three plants, noting that the last complaint received was November 2008.

Public comment was received regarding the need for additional improvements and reductions, a request to conduct fence-line mobile monitoring and re-evaluate risks, a request to disallow grandfathering of existing facilities, and for pre-noticing to child care centers during high emission operations.

The Committee then received a presentation on the proposed Metal Melting Rule and an overview of metal melting and processing facilities. The Committee reviewed applicable federal, state and District rules. Next steps in rule development include additional technical research, outreach to stakeholders, workshops, socioeconomic and environmental analysis, preparation of the final proposal, and public hearings to be held in the fall.

Public comment was received from a representative of the California Metals Coalition who supported the District's efforts in meeting with them early in the process.

The Committee then received a presentation of the 55 proposed Stationary Source measures in Draft Bay Area Clean Air Plan (CAP), reviewed the CAP's purpose to update the 2005 Ozone Strategy, and to develop an integrated multi-pollutant plan. The Committee discussed the District's extensive public outreach, workshops, collaboration with regional agency partners, consultation with CARB and neighboring air districts, and development of a multi-pollutant evaluation methodology.

The Committee then reviewed the District's Rule Development process and the draft 2010-2013 regulatory agenda.

The next meeting of the Committee is scheduled for Thursday, May 13, 2010 at 9:30 a.m.

**Board Action:** Director Uilkema made a motion to approve the report of the Stationary Source Committee; Director Ross seconded the motion; carried unanimously without objection.

8. **Report of the Budget and Finance Committee Meeting of April 28, 2010**  
Chairperson Daly

The Budget and Finance Committee met on April 28, 2010 and approved the minutes of March 24, 2010.

The Committee received the Financial Report for the third quarter for Fiscal Year 2009/2010. The Committee reviewed a comparison of budget to actual revenue and actual expenditures, investment balances and fund balances. Prior to making its recommendation on the proposed budget, the Committee held discussion on proposed amendments to Regulation 3: Fees.

Committee members discussed proposed fee increases, the District's fiscal year 2009 cost recovery gap of 46%, cost containment measures, existing tracking of Title V permit preparation and enforcement, potential impacts that an increase may have on facilities, and staff's proposal to initiate a cost recovery study.

Public comment was received from the California Council for Environmental & Economic Balance (CCEEB) opposing the proposed 10% increase for Schedule P fees and supporting an across-the-board 5% increase.

A motion was made to forward staff's recommendation to the Board of Directors to increase all fees by 5% and Schedule P fees at 10%. A substitute motion was then made to forward a recommendation to increase all fees by 5% across-the-board. Both motions resulted in a tie 4-4 vote. The Committee requested the matter be forwarded to the Board of Directors with an explanation of the Committee's deliberations.

The Committee then continued its discussion of the proposed budget. The discussion included a review of the District's response to budget challenges. The response is a balanced, multi-faceted and multi-year approach that includes maintaining vacancies, reducing services and supplies, deferring capital spending, and addressing cost recovery in permit fees. The Committee discussed assumptions for property tax projections and suggested periodic review of appropriate reserve targets.

The Committee recommended Board of Directors' approval of the proposed budget for Fiscal Year 2010/2011, with the caveat that depending upon the action of the Board relating to the fee schedule, if lower fees are proposed, the difference be taken from the services and supplies budget which would be an additional across-the-board cut to that line item.

The Committee then considered and recommended Board of Directors' authorization for the Executive Officer/APCO to enter into a capital lease agreement for server, network and telephone systems.

The next meeting of the Budget and Finance Committee is scheduled for May 20, 2010. Director Daly made a motion that the Board of Directors approve the report and recommendations of the Budget and Finance Committee, with the exception of the proposed increases to permit fees.

**Board Action:** Director Daly made a motion to approve the report and recommendations of the Budget and Finance Committee, with the exception of the proposed increases to permit fees; Director Uilkema seconded the motion; carried unanimously without objection.

Director Uilkema confirmed that an explanation would be provided regarding the Committee's deliberation of the 5% versus the 10% for Schedule P fees during discussion of the next item.

## **PUBLIC HEARING(S)**

### **9. Public Hearing to Receive Testimony on Proposed Amendments to Air District Regulation 3: Fees**

Director of Engineering, Brian Bateman, presented the proposed fee regulation amendments and reviewed background information on the authority to assess fees, the cost recovery gap due to revenues falling short of full cost recovery, and the limitation for permit fees to be increased by 15%. He presented a chart of District revenue sources for FYE 2010 budget, and budget challenges which include increasing program requirements, rules and regulations, and decreases in expected revenue.

Mr. Bateman discussed the District's responses to budget challenges of reducing expenditures, maintaining vacancies, increasing efficiency through business process improvements, making modest use of reserves, and increasing cost recovery through fee increases. An illustration of fee increase effects on cost recovery shows that fees would need to be increased by 72% to reach full cost recovery.

Average fee increases have been 9% each year. Staff proposes a 5% increase in all fees, except for Fee Schedule P (Title V) which is proposed for a 10% increase. Mr. Bateman discussed the extensive work and public processes involved with Title V Permits, noting that the effect on fee revenue would be about a 5.5% increase which would otherwise result without a fee increase, and represents \$1.6 million in revenue. A total of 97 Title V facilities exist in the Bay Area, and the average increase would be 6.4%. The overall range of increases is 5.3% to 8.0%, and proposed increases for the five refineries would range from 5.6% to 6%.

Mr. Bateman discussed the additional proposed fee amendments to:

- Expand definition of "small business" from \$600,000 to \$750,000;
- Create new "green business" application fee discount of 10%;
- Create new application fee discount for attendance at Industry Compliance School;
- Move temporary amnesty provision to Regulation 3 (penalty fees), and extend applicability to registrations; and
- Update Schedule N fee calculations to be based on Cancer Potency Factors rather than Unit Risk Factors.

For small businesses, Mr. Bateman noted that increases in annual permit renewal fees would range from \$33 to \$120. He presented a comparison of Bay Area AQMD fees with the South Coast AQMD, which shows South Coast's fees to be 2.5 times higher, with the exception of PERC dry cleaners which he said will be phased out over time.

Mr. Bateman discussed verbal and written comments received from CCEEB, who opposes the 10% increase but supports an across-the-board 5% increase. WSPA commented that the District needs to contain costs and that increased fees should yield an increased level of service to fee payers. Two auto body shops and a gas station opposed fee increases, citing hardships due to the economic downturn.

Regarding responding to comments, staff proposes hiring an accounting firm to update the District's cost recovery study. The same methodology would be used as in 2005 which could be completed by the end of this calendar year for use in next year's fee schedule review. He noted that the proposal would convene a stakeholder steering committee to review cost increases over time and look at cost

containment measures. He said another option would be to adopt an across-the-board 5% increase, which would reduce fee revenue by 150,000. Fee revenue would be thereby increased by \$1.45 million versus \$1.6 million. Each District department would reduce its service and supplies budget by an additional 1% to pay this difference.

Mr. Bateman then reviewed the Rule development schedule, with consideration for adoption on June 16, 2010, with an effective date of July 1, 2010.

Board Member Comments/Discussion:

Director Torliatt voiced concerns with the District incurring continued cost recovery issues, citing the annual restriction to raise fees by 15%, and she questioned further budget impacts proposed legislation would have on the District if facilities permitted under Title V are expected to double. Mr. Bateman indicated that EPA's tailoring rule, if adopted, will not be effective until next January. Additional facilities filing Title V applications will not be due within a year from that date, and therefore, the District will not see much difference or impact in the next fiscal year.

Director Torliatt suggested, and Mr. Bateman confirmed, that additional amendments proposed such as discounts to small and green businesses would be advertised.

Director Daly suggested the cost recovery study include all Title V facilities in the Bay Area and he voiced strong opposition to the District continuing to not recover its costs when large companies have invested millions to thwart the District's mission.

Public Comments:

Bill Quinn, CCEEB, requested the Board adopt an across-the-board alternative of 5% increases, given severe economic conditions. He acknowledged the District was not in full cost recovery, supported the cost recovery study be completed, and reported on CCEEB's support on AB32.

Director Ross questioned and confirmed that staff would need to clarify whether a mid-year budget adjustment could be done, given results from the cost recovery study. He said he sees the 58% cost recovery gap as a District-paid subsidy, and while he is supportive of business, he did not know any business that would sell their products 58% cheaper. He recommended the District stay on the path to cost recovery.

Director Yeager questioned and confirmed with staff that the South Coast Air District's fees are higher due to them having less property tax revenues, different rate structures and emission-based fees, and fees on air pollution control equipment, which this District does not support.

Director Spering confirmed with Mr. Broadbent that staff utilizes the same methodology each year from the cost recovery study done in 2005 which only looks at cost recovery. Mr. Broadbent added that the new study would include a thorough review and include review of cost containment, as well. Director Spering voiced concerns with burdening businesses and supported a modest fee increase, completion of a cost recovery and containment study, and then suggested the District determine the actual need for further increases.

Director Haggerty echoed comments made by Director Daly, stating he did not sympathize with Title V facilities given their billions in profits, and also echoed comments made by Director Spering.

**Board Motion:** Director Haggerty made a motion to increase all fees, implement a cost recovery and containment study, and if justified, increase fees by another 5%; Director Hosterman seconded the motion.

**Discussion:** Director Hudson discussed differences in the number of days it takes the South Coast Air District to process permits versus this District and confirmed that staff continues to meet with WSPA regarding further efficiencies.

Director Kalra said he could not support the current motion given recent discussions at the Budget and Finance Committee meeting. He believed that the cost recovery information is accurate and justified, said a 10% increase for Schedule P fees is moderate, and that the District has been providing a substantial subsidy. He also pointed out that the largest Title V facility would incur a \$1,500 increase, with smaller facilities paying far less.

Director Uilkema echoed comments made by Director Spering, and supported conducting the cost recovery study to justify increasing fees by 10%. Director Hosterman voiced appreciation for comments made and supported a 5% across-the-board increase and completion of a cost recovery and containment study.

Director Ross questioned why the District should spend \$150,000 on a consultant to determine that it is behind in its cost recovery. He is empathetic about economic times and burdens placed on businesses; however, Title V facilities would simply pass increases onto consumers, and if it is found that the District is making a profit, it could always reimburse permittees.

Director Torliatt did not support the current motion, citing the existing cost recovery gap and future requirements placed on the Air District by the EPA, which will cause further subsidies. Secretary Bates echoed Director Torliatt's comments and agreed that taxpayers would be underwriting Title V companies, which he thinks is appalling. Director Garner also supported a 10% increase in Schedule P fees and opposed having a cost recovery study done because the District already knows it is not recovering costs. She pointed out that approval of a 5% across-the-board increase would impose a \$300,000 burden on the District.

Secretary Gioia further reviewed results from the 2005 cost recovery study with Mr. Broadbent and clarified that an updated study would look at efficiencies put in place by the District, cost recovery, costs of permitting, and containment costs. He confirmed that the 10% increase in Schedule P fees would actually result in the largest facility incurring an actual 8% increase and the smallest facility, a 5.3% increase, and supported staff's recommendation.

Director Haggerty asked for a vote on the proposed motion.

**Vote on Initial Board Motion:** Director Haggerty made a motion to increase all fees by 5%, implement a cost recovery and containment study, and if justified, increase Schedule P fees by an additional 5%; Director Hosterman seconded the motion. Motion failed by the following Roll Call Vote (7-12-3): Ayes: Groom, Haggerty, Hosterman, Hudson, Miley, Spering and Uilkema. Noes: Bates, Daly, Dunnigan, Garner, Gioia, Kalra, Klatt, Mar, Ross, Torliatt, Yeager, Wagenknecht. Absent: Brown, Kniss and Zane.

**Board Motion:** Secretary Gioia made a motion to approve 5% increase in all fees, except for Fee Schedule P, approve 10% increase in Schedule P fees, and implement a cost recovery and containment study; Director Daly seconded the motion.

**Discussion:** Director Garner confirmed with Mr. Broadbent that the consultant conducting the study would not only evaluate cost recovery, but would also review efficiency gains, cost containment, and look at loss in revenue. The scope of the study would be presented to the Budget and Finance Committee.

**Board Action:** Secretary Gioia made a motion to approve 5% increase in all fees, except for Fee Schedule P, approve 10% increase in Schedule P fees, and implement a cost recovery and containment study. Motion approved by the following Roll Call Vote: (18-1-3) Ayes: Bates, Daly, Dunnigan, Garner, Gioia, Haggerty, Hosterman, Hudson, Kalra, Klatt, Mar, Miley, Ross, Spering, Torliatt, Uilkema, Yeager and Wagenknecht. Noes: Groom; Absent: Brown, Kniss and Zane.

## **PRESENTATION**

### 10. **Update on Proposed Revisions to the District's California Environmental Quality Act (CEQA) Guidelines and Thresholds of Significance**

Mr. Broadbent stated that on June 2, 2010, the Board of Directors will consider proposed revisions to the District's CEQA guidelines and thresholds of significance, stating that last January the proposed updates were considered and the Board directed staff to work with cities and counties. He stated Mr. Hilken would review the extensive outreach and work done to date.

Director of Planning and Research, Henry Hilken, discussed the need to update the District's CEQA guidelines, citing transportation, land use and air quality impacts. He discussed the District's extensive outreach efforts in the form of workshops for both the public and government sector, presentations, meetings, telephone calls, email updates, Board meetings, CARE Task Force meetings. He gave a summary of workshop comments and feedback, and provided an overview of technical tools and training, proposed GHG thresholds and local community risks and hazards thresholds. He stated that support exists for community-wide planning approaches, and he described collaboration between the District and local governments and progress made to date. Case studies were conducted to test thresholds and demonstrate technical tools and he presented various case studies performed in The Uptown, Oakland; North Richmond Specific Plan; and Japantown Redevelopment Project in San Jose.

Next steps include conducting URBEMIS training for local staff in May, risk and hazard evaluation training in June/July, proceeding with CRRP pilot projects, seeking Board approval of significance thresholds June 2 in San Jose, and continuing with provisions for on-going District technical assistance to lead agencies.

#### **Board Member Comments/Discussion:**

Director Yeager requested examples of case studies for suburban projects that may not necessarily meet CEQA thresholds.

Director Kalra echoed the request made by Director Yeager, commended District staff for their outreach efforts to agencies, and said he looks forward to the June 2, 2010 Board Meeting in San Jose.

Director Groom also acknowledged staff outreach and indicated local concerns had been allayed.

Secretary Gioia questioned the opportunity to have guidelines effective at the time CRRPs are approved in order to allow agencies to consider alternatives. He requested more detail guidance on CRRPs and asked to align the effective date of the threshold guidelines so that communities can have some time to complete CRRPs, citing a potentially affected development proposed in the City of Richmond. Lastly, he questioned and confirmed that the CEQA amendments would be presented to the MTC Planning Committee on May 14, 2010 and to the JPC on May 21, 2010.

Director Haggerty thanked staff for their work, confirmed that questions and comments were being received and tracked at workshops and meetings by staff, requested staff explain how case studies were chosen, and supported examples of real projects that have problems meeting the guidelines, such as the Santa Clara Stadium project.

Director Sperring commended staff for their efforts to link land use efforts and MTC. He believed it was important to engage the JPC with discussion on the case studies where projects do not meet guidelines, as well as to the Board. He cited the process as a balanced approach and a working tool, and thinks it will serve the District well, reiterating the fact that the guidelines make communities better.

Director Uilkema commended staff for clarifying questions, but thinks people are concerned with the effect guidelines will have on long-range housing goals. She also supported the suggestion for additional review of case studies where projects do not meet guidelines.

Director Hosterman stated that she was initially skeptical about what the increased thresholds might mean in her community, given the economy, but her fears have been allayed with added clarity on the guidelines and CRRPs.

Mr. Broadbent appreciated Board Member comments and direction, and noted that staff will present case studies of projects that may not pass guidelines.

Secretary Gioia referred to the pilot projects for the cities of San Jose and San Francisco and questioned availability of funding for other jurisdictions.

Mr. Broadbent reported that the Executive Committee will meet and consider selection of a contractor to assist with the development of local emissions inventories to support CRRPs, which will be brought to the Board for approval at the June 2, 2010 Board meeting.

## **CLOSED SESSION**

The Board of Directors adjourned to Closed Session at 11:57 a.m.

11. **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):*
  - A) **Andrea Gordon v. Bay Area AQMD, United States District Court, N.D. Cal., Case No. CV 08-8630 BZ**

**OPEN SESSION**

The Board of Directors reconvened the Regular Board Meeting at 12:01p.m. District Counsel Brian Bunger reported that there was no reported action taken.

**OTHER BUSINESS**

12. **Report of the Executive Officer/APCO**

Executive Officer/APCO Jack Broadbent reported that dry cleaning facilities are facing a July 1, 2010 deadline, and many who are still relying on PERC and have financing issues will find themselves unable to comply with regulations. The District is formulating compliance agreements which will allow facilities more time to move toward wet cleaning alternatives. He indicated that Director Mar has been meeting with affected businesses in his District who have switched to wet cleaning alternatives.

Mr. Broadbent provided an update on the Port of Oakland, stating that CARB has allowed an extension of the compliance deadline to April 30, 2010 for truckers to secure retrofit devices. He noted that some truckers have received funding and some have not, who are protesting.

He reported that the District was a recipient of a number of awards, which were presented to the Board and read into the record from Breathe California and the Climate Action Reserve. He also reported that the Spare the Air season began on May 3, 2010 and noted that outreach and news stories will be advertised.

13. **Chairperson's Report**

Chairperson Wagenknecht announced that at its April 14, 2010 meeting, the Alameda Mayors Conference re-appointed Tom Bates to serve another two-year term on the District Board of Directors. Chairperson Wagenknecht also announced the cancellation of the May 19, 2010 Board of Directors meeting.

14. **Time and Place of Next Meeting: Regular Meeting** - Wednesday, June 2, 2010, 9:45 a.m., San Jose City Hall, Council Chambers, 200 E. Santa Clara Street, San Jose, CA 95113.

15. **Adjournment:** The Board of Directors Meeting adjourned at 12:15 p.m.

Lisa Harper  
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson, Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 26, 2010

Re: Board Communications Received from May 5, 2010 through June 1, 2010

RECOMMENDED ACTION:

Receive and file.

DISCUSSION

A list of Communications directed to the Board of Directors received by the Air District from May 5, 2010 through June 1, 2010, if any, will be at each Board member's place at the June 2, 2010 Special Board meeting.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 25, 2010

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 out-of-state business travel summarized below covers the period from April 1 – May31, 2010. Out-of-state travel is reported in the month following travel completion.

DISCUSSION

Jack Broadbent, Executive Officer/APCO, attended CFEE-Delegation Conference in Canada, March 24 – April 2, 2010.

Damian Breen, Director of Strategic Incentives Division, attended Nissan Factory Review Electric Vehicle Conference in Nashville, TN, April 2 – 5, 2010.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Linda J. Serdahl, CPA, CFE  
Reviewed by: Jack M. Colbourn

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chair Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 11, 2010

Re: Approval of Purchase Order in Excess of \$70,000 for Replacement of Air  
Monitoring Instruments

RECOMMENDED ACTION:

Authorize the Executive Officer to issue a Purchase Order to ThermoFisher Scientific in an amount not to exceed \$190,935 for air monitoring instruments.

SUMMARY

Division II, Section 4.3 of the Administrative Code requires that the Board authorize all expenditures over \$70,000. Staff requests that the Board approve the issuance of a Purchase Order to ThermoFisher Scientific (ThermoFisher) in the amount not to exceed \$190,935 to replace air monitoring instrumentation.

Staff evaluated instruments from the two primary manufacturers of air monitoring instruments. ThermoFisher instruments provide the highest overall value to the Air District based on initial and operational costs. Funds for these purchases were included in the FY 2009-2010 Budget in the Air Monitoring Program Capital Equipment Account, item 13 (Air Monitoring Instruments/Parts/Repairs).

BACKGROUND

The Air District operates 28 monitoring stations, with a total of over 110 instruments. Staff developed a five-year plan to replace instruments when they have reached the end of their useful service life in the existing air monitoring network. This is this fourth year of the plan's replacement schedule, and this request covers 17 instruments due for replacement. The manufacturer offered a 15% discount for the order.

DISCUSSION

Currently, only two manufacturers produce the range of required criteria pollutant equipment certified by the U.S. EPA for ambient air monitoring: Teledyne/Advanced Pollution Instrumentation (API), and ThermoFisher. Staff have operational experience with instruments from both API and ThermoFisher. Staff have found that ThermoFisher instruments better meet operational requirements, with reduced downtime and more stable and accurate performance.

Additionally, the Air Monitoring Section maintains a spare parts inventory for ThermoFisher instruments, whose parts are less expensive than API's, and has significant training and expertise in the operation and repair of the instruments.

Staff have evaluated equipment from both manufacturers based on performance specifications, operational experience and costs. Based on these criteria, staff found ThermoFisher instruments better meet the operational needs of the Air District at a lower overall cost.

Purchase of the ThermoFisher instruments will:

- result in less instrument downtime,
- provide measurements with greater accuracy and stability,
- increase standardization,
- maintain the current spare parts inventory, and
- avoid additional operational, maintenance and training costs.

Therefore, staff recommend purchasing the required air monitoring instruments from ThermoFisher because this represents the best overall value to the Air District.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

Funds for this purchase were included in the FY 2009-2010 Capital Equipment Budget, item 13 (Air Monitoring Instruments/Parts/Repairs).

Respectfully Submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Eric Stevenson  
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 25, 2010

Re: Report of the Stationary Source Committee Meeting of May 13, 2010

RECOMMENDED ACTION

Receive and file.

BACKGROUND

The Stationary Source Committee met on Thursday, May 13, 2010 and considered and received the following reports and updates:

- A) Proposed Amendments to Regulation 9, Rule 10: NOx and CO from Boilers, Steam Generators and Process Heaters in Petroleum Refineries
- B) Status Report on the Flare Minimization Plans under Regulation 12, Rule 12, Flares at Petroleum Refineries

Attached are the staff reports presented to the Stationary Source Committee for your review.

Chairperson Gayle Uilkema will give an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Lisa Harper  
Approved by: Jennifer Chicconi

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Uilkema and Members  
of the Stationary Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 3, 2010

Re: Proposed Amendments to Regulation 9, Rule 10: NO<sub>x</sub> and CO from Boilers,  
Steam Generators and Process Heaters in Petroleum Refineries

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

Regulation 9, Rule 10 limits nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) emissions from boilers, steam generators and process heaters operating in petroleum refineries. Further Study Measure FS 14 in the 2005 Ozone Strategy proposes to examine NO<sub>x</sub> emissions at refinery heaters and the feasibility and cost-effectiveness of further NO<sub>x</sub> controls, and this proposal is reiterated in Control Measure SSM 10 in the draft 2010 Clean Air Plan.

In carrying out Further Study Measure FS 14, staff has determined that further NO<sub>x</sub> emission reductions are not cost-effective for most refinery heaters. However, staff has determined that the NO<sub>x</sub> emission limit for one class of refinery heaters – CO boilers - should be reduced at this time. CO boilers are a type of steam generator that processes flue gas from coking units or from catalytic cracking units to reduce emissions of carbon monoxide, a criteria pollutant. CO boilers tend to be among the largest refinery heaters, and six of these heaters are operated at three of the Bay Area refineries.

DISCUSSION

Staff will provide the Committee with the following information:

- Description of the current rule requirements;
- Description of the boilers, steam generators and process heaters in petroleum refineries and their emissions;
- Proposed amendments to Regulation 9, Rule 10;
- Estimated emissions reductions and associated costs;
- Rule development process to date; and
- Next steps.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Julian Elliot  
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Uilkema and Members  
of the Stationary Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 13, 2010

Re: Status Report on the Flare Minimization Plans under Regulation 12,  
Rule 12: Flares at Petroleum Refineries

RECOMMENDED ACTION:

Informational Report. Receive and file.

BACKGROUND

In order to minimize the frequency and magnitude of flaring at petroleum refineries, the District Board of Directors adopted Regulation 12-12: Flares at Petroleum Refineries on July 20, 2005. The regulation recognizes that refinery flares are first and foremost a safety device and it allows refineries to develop plans to continuously minimize flaring without compromising safety. The regulation prohibits the non-emergency use of a refinery flare unless that use is consistent with an approved Flare Minimization Plan (FMP).

Each FMP must include:

- Information regarding the design and operation of the facility as it relates to flaring;
- Description of the prevention measures previously taken that permanently capture current emission reductions and planned measures to further reduce flare emissions at the refinery; and
- Commitments to implement all additional feasible prevention measures expeditiously.

The regulation functions as a continuous improvement process by requiring the refineries to update their FMP annually to incorporate any new prevention measures developed as a result of investigations into the primary cause and contributing factors for significant flaring events.

DISCUSSION

The Air District's flare regulations have been making progress in reducing the frequency and magnitude of flaring as indicated by downward trends in the total volume of vent gas flared, the number of flaring days, and the total emissions of methane and non-methane hydrocarbons. The flare control regulation is structured to account for the variability of petroleum refinery designs, to ensure continuous improvement by identifying flaring prevention measures specific to each refinery's design and operation, and to provide an opportunity to consider public input in developing the most effective FMP.

The District uses a robust engagement process for evaluating FMPs. In addition to working with each refinery, district staff considers all public comments received for each plan. Throughout the FMP engagement process, the District staff focuses on ensuring all feasible prevent measures identified as a result of the investigations into the reasons for flaring are expeditiously implemented. The engagement with refineries centers on the following main areas: vent gas source reduction efforts; fuel gas balance between gas generators and consumers; vent gas compressor capacities; and sour gas scrubbing capabilities.

While emissions and volumes from petroleum refinery flares have been showing steady decreases since 2004 for most pollutants, the Air District does not expect these trends to continue due to the cyclic nature of maintenance activity at refineries. It is not uncommon for maintenance turnarounds to occur on 3 to 5-year intervals, or longer. This long time-frame activity makes any short-term analysis of annual flaring trends difficult, but longer rolling 5-year annual averages are appropriate. Key parameters for tracking the frequency and magnitude of petroleum refinery flaring are presented in Table 1.

Table 1: Petroleum Refinery Flaring Frequency and Magnitude

<b>Five Year Rolling Annual Averages</b>										
Refinery	Volume (MMSCF*)		Number of flaring days**		Total Emissions (tons per year)					
	2004-2008	2005-2009	2004-2008	2005-2009	Methane		Non-Methane		Sulfur Dioxide	
	2004-2008	2005-2009	2004-2008	2005-2009	2004-2008	2005-2009	2004-2008	2005-2009	2004-2008	2005-2009
Chevron	84.6	73.6	139	119	7.7	7.1	30.1	26.9	64.9	47.6
CP	86.3	71.2	83	86	8.2	11.3	15.4	22.0	77.6	59.3
Shell	198.1	181.7	284	223	7.6	6.2	14.6	10.9	3.9	5.1
Tesoro	228.0	159.6	283	284	18.2	11.9	46.2	17.0	117.3	59.0
Valero	153.2	102.7	292	293	11.1	7.8	37.2	27.4	54.2	41.4
<b>Totals</b>	<b>750.2</b>	<b>588.8</b>	<b>1081</b>	<b>1005</b>	<b>52.8</b>	<b>44.3</b>	<b>143.5</b>	<b>104.2</b>	<b>317.9</b>	<b>212.4</b>

\* MMSCF = Million Standard Cubic Feet

\*\* Based on Regulation 12, Rule 11: Flare Monitoring Monthly Reports, Hourly Volume of Vent Gas Flared

The District is committed to the goal of continuous improvement in minimizing petroleum refinery flaring and continues to work with all stakeholders to achieve progress through the petroleum refinery FMPs, including enforcement of the requirements of Flare Monitoring: Regulation 12-11 and Flare Control: Regulation 12-12. Since adoption of the Flare Monitoring rule (June 4, 2003) notices of violation have been issued for 66 violations involving deficiencies in notification, monitoring, reporting and minimization. Table 2 illustrates the distribution of these violations.

Table 2: Distribution of flare regulation violations June 2003 thru April 2010

Refinery	Total # of Violations	Flow Monitoring	Composition Monitoring	Records	General Monitoring	Flare Minimization	Notification	Reporting of Cause
Chevron	24	1	17	5		1		
ConocoPhillips	11	4	6		1			
Shell	2		2					
Tesoro	14		7				4	3
Valero	15		12	1	2			
<b>Totals</b>	<b>66</b>	<b>5</b>	<b>44</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>

The Committee will receive a report on the petroleum refinery FMPs, Prevention Measures, Metrics Trending, and Regulatory Compliance.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Alex Ezersky  
Reviewed by: Kelly Wee

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 25, 2010

Re: Report of the Climate Protection Committee Meeting of May 19, 2010

RECOMMENDED ACTION

The Committee recommends Board of Directors' approval of up to \$4.4 million for a Greenhouse Gas Reduction Grant Program (GGRGP) and authorization for the Executive Officer/APCO to execute Grant Agreements for the recommended projects and contingencies to expend this funding.

BACKGROUND

The Climate Protection Committee met on Wednesday, May 19, 2010. The Committee received the following reports and updates:

- A) Status Report on the Implementation of Greenhouse Gas Regulations for Stationary Sources
- B) Consideration of GGRGP Recommended Projects and Contingencies
- C) Climate Protection Grant Program Update

Attached are the staff reports presented in the Climate Protection Committee packet.

Chairperson, Pamela Torliatt, will provide an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACTS

- A) None.
- B) None. Through the GGRGP, the Air District will distribute "pass-through" funds to public entities on a reimbursement basis. Administrative and audit costs for the program are provided by the funding source.
- C) None. The Climate Protection Grants were funded out of the FY 2007/08 budget.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Lisa Harper  
Approved by: Jennifer Chicconi

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

TO: Chairperson Torliatt and  
Members of the Climate Protection Committee

FROM: Jack Broadbent, Executive Officer/APCO

DATE: May 12, 2010

SUBJECT: Status Report On The Implementation Of Greenhouse Gas Regulations for  
Stationary Sources

---

RECOMMENDED ACTION

Informational report; receive and file.

BACKGROUND

To ensure effective implementation of the AB32 Greenhouse Gas (GHG) Scoping Plan, the California Air Resources Board (CARB) has worked with local Air Districts and the California Air Pollution Control Officers Association (CAPCOA) to plan and delineate rule development and compliance responsibilities, and develop the detailed implementation timeline. Seventy-two measures are listed in the timeline, many apply to stationary sources, and some have potential for significant impact on stationary sources in the Bay Area. The implementation of these measures has begun and will continue over the next two years, with emphasis on measures identified as discrete early action and scheduled for implementation this year.

DISCUSSION

Numerous GHG reduction measures require coordinated efforts between CARB and the local air districts to implement, track, and identify opportunities for emission reductions. Recent work has included measures that focus on refrigerant management, landfills, semiconductor operations, petroleum refineries, natural gas transmission, oil and gas extraction operations, and regional transportation. Staff has been working closely with CARB and CAPCOA on all these measures and anticipates additional staff resource impacts as GHG regulations are implemented.

NEXT STEPS

Staff will provide a status update on the District's participation and progress in reducing GHG emissions from stationary sources in the Bay Area.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Alex Ezersky  
Reviewed by: Kelly Wee

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Torliatt and  
Members of the Climate Protection Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 11, 2010

Re: Consideration of Approval for Greenhouse Gas Reduction Grant Program Projects

RECOMMENDATIONS

Request the Committee recommend the Air District Board of Directors:

1. Approve Greenhouse Gas Reduction Grant Program (GGRGP) project components in Attachment A and contingency project components listed in Attachment B; and
2. Authorize the Executive Officer/APCO to execute all contracts and contingencies to expend this funding for the recommended GGRGP project components listed Attachment A and contingency project components listed in Attachment B.

BACKGROUND

On September 10, 2007, the Attorney General of California (AG) entered into a Settlement Agreement with ConocoPhillips Company (Conoco) to resolve a dispute regarding the environmental impact of greenhouse gas (GHG) emissions (primarily carbon dioxide) from the Clean Fuels Expansion Project at their refinery in Rodeo, California. The Settlement Agreement requires Conoco to have made a payment by June 1, 2009, to a Carbon Offset Fund created by the Air District. The payment amount was capped at \$7 million; however, that amount was to be reduced by \$25 for each ton of GHG emission reductions that Conoco achieved at the Rodeo Refinery before the June deadline.

On November 24, 2008, the AG and the Air District entered into a Memorandum of Understanding (MOU) delineating the Air District's authority to administer a GHG emission reduction grant program using funds from the Settlement Agreement. Projects funded under the MOU must achieve verifiable, quantifiable reductions in GHG emissions, and the Air District must give priority to projects in areas nearest the Conoco refinery in Rodeo. Based on the emissions reductions achieved by the refinery and verified by the Air District, \$4,443,025, was received from Conoco by June 1, 2009, and deposited into the Air District's Carbon Offset Fund.

DISCUSSION

In preparation of this Program, the Air District staff participated in five community meetings, gathering input from stakeholders and interested parties. Meetings were held on September 4, 2008, January 26, 2009, May 26, 2009, July 1, 2009, and July 27, 2009. Using this input, the Air District developed guidelines and a Request for Proposals (RFP) for the Greenhouse Gas

Reduction Grant Program (GGRGP). On September 3, 2009, the Air District issued the RFP and Program Guidelines, following review by the AG as required by the MOU. The GGRGP was developed to fund eligible energy efficiency and renewable energy projects at non-residential, public, government buildings located in Rodeo, Crockett, Hercules, and Pinole.

To assist potential applicants, the Air District conducted three application workshops in the city of Rodeo held on October 16, 2009, November 19, 2009, and January 13, 2010. The final proposal acceptance period closed on February 19, 2010, and the Air District received a total of 24 proposals containing 94 components from 10 agencies requesting over \$11 million. Over the past several weeks, staff worked with applicants to gather additional documentation and information in order to determine eligibility and project component ranking based on cost-effectiveness.

Based on its review, staff recommends a total of 8 projects with 55 components requesting a total of \$4,000,000 be awarded funding. All remaining funds (approximately \$400,000) will be used for administrative and audit related expenses. In total, the recommended projects will achieve a CO<sub>2</sub> reduction of 13,036 tons at a maximum cost-effectiveness of \$507/ton of reduced emissions. A complete list of the 8 project sponsors and the recommend project components is found in Attachment A.

Attachment B contains one project component also listed on Attachment A that could not be funded in full and 5 project components that are also eligible for funding but did not rank high enough in terms of cost-effectiveness to be considered for funding at this time. In the event that any of the project components from Attachment A do not proceed, they will be replaced in order with the highest-ranking cost-effective components listed on Attachment B.

Attachment C lists 34 project components that are not recommended for funding either because their cost-effectiveness is greater than \$600/ton of CO<sub>2</sub> reduced or because the application for the project component was incomplete as of May 5, 2010.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. Through the GGRGP, the Air District will distribute “pass-through” funds to public entities on a reimbursement basis. Administrative and audit costs for the program are provided by the funding source.

Respectfully submitted,

Jack P. Broadbent  
Executive Director/APCO

Prepared by: Avra Goldman  
Reviewed by: Karen Schkolnick

Attachment A: GGRGP - Projects Recommended for Funding  
Attachment B: GGRGP - Contingency List  
Attachment C: GGRGP - Project Components Not Recommended for Funding

Attachment A: Greenhouse Gas Reduction Grant Program (GRRGP) Recommended Projects (As of 5/5/10)

Applicant Name: Contra Costa County							1 project component
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost	
09GHG09	Rodeo Senior Citizen Club	EE	Install fluorescent light fixtures	\$3,993	\$285	\$5,909	
<b>Subtotal</b>				<b>\$3,993</b>			
Applicant Name: Rodeo-Hercules Fire District							7 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost	
09GHG15	Station 75	EE	Install vending machine controller	\$85	\$37	\$175	
		EE	Install fluorescent light fixtures	\$1,351	\$125	\$2,247	
		EE	Replace gas fired water heater	\$3,019	\$195	\$5,019	
<b>Subtotal</b>				<b>\$4,455</b>			
09GHG16	Station 76	EE	Install vending machine controller	\$85	\$37	\$175	
		EE	Install fluorescent light fixtures	\$2,658	\$78	\$6,103	
		EE	Install reflective window film	\$884	\$82	\$1,117	
		EE	Install high efficiency central water heater	\$4,810	\$290	\$5,019	
<b>Subtotal</b>				<b>\$8,437</b>			
Applicant Name: City of Pinole							23 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost	
09GHG04	Swim Center	EE	Replace pool pump	\$15,270	\$200	\$17,654	
		EE	Install high efficiency central water heater	\$9,575	\$422	\$29,861	
		EE	Install pool heater	\$41,248	\$455	\$64,842	
		RE	Install solar panels	\$207,423	\$455	\$340,344	
<b>Subtotal</b>				<b>\$273,516</b>			
09GHG05	Youth Center	EE	Install fluorescent light fixtures	\$2,315	\$184	\$4,161	
		RE	Install solar panels	\$110,768	\$466	\$175,391	
		EE	Replace furnace	\$4,697	\$494	\$36,963	
<b>Subtotal</b>				<b>\$117,780</b>			
09GHG07	Senior Center	EE	Install vending machine controller	\$89	\$38	\$179	
		EE	Install fluorescent light fixtures	\$1,845	\$48	\$4,205	
		EE	Install high efficiency water heater	\$12,309	\$305	\$12,817	
		EE	Replace furnace (HVAC upgrade)	\$23,127	\$360	\$46,774	
		RE	Install solar panels	\$159,911	\$407	\$289,956	
		EE	Replace split systems	\$6,822	\$492	\$84,822	
<b>Subtotal</b>				<b>\$204,103</b>			
09GHG03	City Hall	EE	Install vending machine controller	\$178	\$45	\$358	
		EE	HVAC upgrades (replace: split-systems, furnace, condenser)	\$4,277	\$109	\$214,990	
		EE	Replace boilers	\$37,120	\$121	\$37,956	
		RE	Install solar panels	\$162,308	\$369	\$327,757	
		EE	Updating HVAC controls	\$79,236	\$427	\$84,950	
<b>Subtotal</b>				<b>\$283,119</b>			
09GHG06	Public Safety	EE	Install high efficiency central water heater	\$1,918	\$17	\$37,956	
		EE	Install vending machine controller	\$89	\$22	\$179	
		EE	Install fluorescent light fixtures	\$5,450	\$34	\$9,880	
		EE	Updating HVAC controls	\$4,224	\$40	\$88,950	
		EE	HVAC replacement (replace split systems, replace boiler)	\$59,725	\$237	\$109,725	
<b>Subtotal</b>				<b>\$71,406</b>			

Attachment A: Greenhouse Gas Reduction Grant Program (GRRGP) Recommended Projects (As of 5/5/10)

Applicant Name: Contra Costa Housing Authority						2 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost
09GHG22	Administration Building	EE	Install vending machine controller	\$89	\$16	\$179
		EE	Install attic and ceiling insulation	\$22,529	\$99	\$23,996
<b>Subtotal</b>				<b>\$22,618</b>		

Applicant Name: John Swett Unified School District						8 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost
09GHG11	John Swett High School	EE	Replace food service equipment (heated cabinet)	\$5,798	\$125	\$6,398
		EE	Install fluorescent light fixtures	\$4,368	\$194	\$5,868
		EE	Install lamps, ballasts, and occupancy controls	\$26,013	\$213	\$28,498
		EE	Install motion sensors (daylighting controls)	\$5,420	\$374	\$5,734
		RE	Install solar panels	\$449,247	\$481	\$660,000
		EE	Replace single paned windows with double paned	\$498,169	\$499	\$504,458
<b>Subtotal</b>				<b>\$989,015</b>		
09GHG12	Carquinez Middle School	EE	Replace fluorescent lamps and ballasts	\$22,277	\$307	\$25,875
		RE	Install solar panels	\$318,052	\$498	\$462,000
<b>Subtotal</b>				<b>\$340,329</b>		

Applicant Name: Crockett-Carquinez Fire District						7 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost
09GHG10	Station 78	EE	Install vending machine controller	\$70	\$13	\$160
		EE	Install fluorescent light fixtures	\$1,894	\$161	\$3,385
		EE	Install high efficiency central water heater	\$1,808	\$281	\$1,893
		EE	Install high efficiency central water heater	\$1,808	\$281	\$1,893
		EE	Replace food service equipment (dishwasher)	\$445	\$398	\$495
		EE	Replace boilers	\$25,336	\$453	\$38,895
		RE	Install solar panels	\$102,363	\$494	\$140,980
<b>Subtotal</b>				<b>\$133,724</b>		

Applicant Name: Rodeo Sanitary District						5 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost
09GHG14	Rodeo Sanitary District	EE	Install fluorescent light fixtures	\$21,050	\$269	\$24,358
		EE	Install new screw press	\$189,100	\$417	\$494,100
		EE	Replace boilers	\$82,534	\$427	\$146,099
		EE	Install variable speed blower	\$146,422	\$433	\$222,680
		EE	Repair airlines	\$21,200	\$460	\$29,200
<b>Subtotal</b>				<b>\$460,306</b>		

Applicant Name: West Contra Costa County Unified School District						2 project components
Project #	Building	Component type	Project Component	Proposed Award	Cost Effectiveness	Total Project Cost
09GHG20	Hercules Middle-High School	EE	Install fluorescent light fixtures	\$84,229	\$330	\$110,845
		RE	Install solar panels	\$1,002,970	\$507	\$2,181,667
<b>Subtotal</b>				<b>\$1,087,199</b>		

Legend: Component Type

- EE = Energy Efficiency
- RE = Renewable Energy

Summary:

Projects	Project components	Proposed award	Total CO <sub>2</sub> reduced
8	55	\$4,000,000	13,036

**Attachment B: GGRGP - Contingency List**

<b>Project Number</b>	<b>Applicant</b>	<b>Building</b>	<b>Project Component</b>	<b>Total Request Amount</b>	<b>Cost Effectiveness</b>	<b>Cost of Project Component</b>
09GHG20 - Continued from Attachment A	West Contra Costa County Unified School District	Hercules Middle-High School	Install solar panels	\$299,933	\$507	\$2,181,667
09GHG16	Rodeo-Hercules Fire District	Station 76	Install solar panels	\$100,140	\$519	\$144,500
09GHG15	Rodeo-Hercules Fire District	Station 75	Install solar panels	\$52,593	\$534	\$84,223
09GHG14	Rodeo Sanitary District	Rodeo Sanitary District	Install solar panels	\$1,496,823	\$549	\$2,625,000
09GHG08	Contra Costa County	Employment and Human Services Building	Install solar panels	\$1,155,074	\$556	\$1,635,098
09GHG08	Contra Costa County	Employment and Human Services Building	Install fluorescent light fixtures	\$43,993	\$586	\$47,460
<b>TOTAL</b>				<b>\$3,148,556</b>		

**Attachment C: GGRGP - Project Components Not Recommended for Funding**

Status	Project Number	Applicant	Building	Project Component	Total Request Amount	Cost Effectiveness	Cost of Project Component
Incomplete	09GHG06	City of Pinole	Public Safety	Replace boilers	\$1,202	\$11	\$2,228
Incomplete	09GHG23	City of Pinole	Fire House	Install fluorescent light fixtures	\$2,782	\$38	\$5,847
Incomplete	09GHG23	City of Pinole	Fire House	Install lighting controls	\$220	\$51	\$300
Incomplete	09GHG06	City of Pinole	Public Safety	Replace Energy Star refrigerators/freezers	\$1,520	\$83	\$6,555
Incomplete	09GHG06	City of Pinole	Public Safety	Replace variable Frequency Drive (VFD) air handler	\$2,060	\$97	\$9,660
Incomplete	09GHG23	City of Pinole	Fire House	Install vending machine controller	\$468	\$116	\$648
Incomplete	09GHG07	City of Pinole	Senior Center	Hot Water Pipe Insulation	-\$33	\$156	\$123
Incomplete	09GHG03	City of Pinole	City Hall	Hot Water Pipe Insulation	-\$33	\$156	\$123
Incomplete	09GHG04	City of Pinole	Swim Center	Hot Water Pipe Insulation	\$1,139	\$276	\$1,179
Incomplete	09GHG07	City of Pinole	Senior Center	Updating HVAC controls	\$16,112	\$240	\$17,325
Incomplete	09GHG03	City of Pinole	City Hall	Install personal computer power management software	\$6,188	\$358	\$7,688
Incomplete	09GHG03	City of Pinole	City Hall	Replace Energy Star refrigerators/freezers	\$548	\$401	\$900
Incomplete	09GHG14	Rodeo Sanitary District	Rodeo Sanitary District	Install wind turbine	\$10,900	\$420	\$42,000
CE	09GHG01	City of Hercules	Library	Install solar panels	\$598,178	\$625	\$808,178
CE	09GHG24	Crockett Community Services District	Crockett Community Center	Replace windows & front doors	\$92,809	\$756	\$93,470
CE	09GHG02	City of Hercules	City Hall	Install solar panels	\$408,000	\$786	\$418,000
CE	09GHG12	John Swett Unified School District	Carquinez Middle School	Install double pane windows	\$354,380	\$852	\$357,000
CE	09GHG21	West Contra Costa County Unified School District	Pinole Valley High School	Install fluorescent light fixtures	\$707,149	\$876	\$741,809
CE	09GHG22	Contra Costa Housing Authority	Administration Building	Install solar panels	\$343,717	\$900	\$360,935
CE	09GHG08	Contra Costa County	Employment and Human Services Building	Upgrade air handling units	\$378,885	\$904	\$392,791
CE	09GHG21	West Contra Costa County Unified School District	Pinole Valley High School	Install LED light fixtures	\$191,522	\$1,070	\$198,552
CE	09GHG10	Crocket-Carquinez Fire District	Station 78	Replace food service equipment (refrigerators-3)	\$1,635	\$1,658	\$3,510
CE	09GHG15	Rodeo-Hercules Fire District	Station 75	Replace dishwasher	\$360	\$1,687	\$510
CE	09GHG08	Contra Costa County	Employment and Human Services Building	Upgrade pneumatic VAV's (air-powered system) to DDC (electric)	\$53,902	\$1,855	\$54,456
CE	09GHG13	John Swett Unified School District	Rodeo Hills Elementary School	Install "cool roof"	\$239,500	\$2,030	\$239,500
CE	09GHG17	West Contra Costa County Unified School District	Collins Elementary School	Install fluorescent light fixtures	\$250,273	\$2,535	\$251,698
CE	09GHG18	West Contra Costa County Unified School District	Ellerhorst Elementary School	Install "cool roof"	\$137,757	\$2,867	\$187,757
CE	09GHG22	Contra Costa Housing Authority	Administration Building	Install dual glazed windows	\$44,403	\$2,882	\$44,600
CE	09GHG19	West Contra Costa County Unified School District	Steward Elementary School	Install "cool roof"	\$121,757	\$2,906	\$166,757
CE	09GHG12	John Swett Unified School District	Carquinez Middle School	Replace boilers	\$728,452	\$2,937	\$730,794
CE	09GHG15	Rodeo-Hercules Fire District	Station 75	Refrigerator/freezer	\$1,330	\$3,468	\$1,365
CE	09GHG10	Crocket-Carquinez Fire District	Station 78	Replace existing single pane windows with double paned	\$10,728	\$4,240	\$29,899
CE	09GHG16	Rodeo-Hercules Fire District	Station 76	Replace furnace oil and gas	\$24,999	\$4,358	\$25,350
CE	09GHG16	Rodeo-Hercules Fire District	Station 76	Energy efficient windows	\$19,009	\$16,213	\$24,709
<b>TOTAL</b>					<b>\$4,751,818</b>		

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Office Memorandum

To: Chairperson Torliatt and Members  
of the Climate Protection Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 11, 2010

Re: Climate Protection Grant Program Update

---

RECOMMENDED ACTION:

None. Information only.

BACKGROUND

On December 19, 2007, the Air District Board of Directors awarded 53 climate protection grants totaling \$3 million to local governments and non-profit organizations in all nine counties of the Bay Area. Grants were made in the areas of youth outreach, climate planning, local government capacity-building, regionalizing best practices, and fostering innovation. Since execution of the contracts, staff has worked with grant recipients to ensure completion of deliverables and track the results of the projects.

DISCUSSION

The District's Climate Protection Grant Program provided critical support to a wide range of projects that are now achieving tangible results. The Climate Protection Grants subsidize a variety of projects in the following program areas:

- 1) Youth Outreach – Outreach projects engage youth in promoting personal behavior changes that reduce GHG emissions in their homes, schools and communities.
- 2) Climate Planning – Climate planning projects use the local planning process to achieve long-term reductions in energy use and greenhouse gas emissions. Climate Planning grants fund two types of activities:
  - Climate Protection Planning – integrating climate protection into general plans or developing stand-alone climate action plans.
  - Capacity-building – seed funding to establish permanent staffing positions to manage and coordinate energy and climate protection programs.
- 3) Regional Strategies – Funds awarded to projects with greatest regional application and long-term reduction of greenhouse gas emissions. Regional Strategies grants fund two types of activities:

- Regionalizing Best Practices – taking strategies that have proven their value at reducing GHG emissions on a small scale and ramping them up for broader application.
- Fostering Innovation – incubating innovative new projects or policy approaches to reducing greenhouse gas emissions.

A list of all Climate Protection Grants is included as Attachment A.

Staff will provide an update on the status of the projects funded through the Climate Protection Grant program. The update will include general progress grantees are making with the implementation of their projects, details on selected grants, and results from project implementation.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Climate Protection Grants were funded out of the FY 2007/08 budget.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Abby Young  
Reviewed by: Henry Hilken

**Climate Protection Grant Awards**

Grant Category	Applicant	Type of Applicant	County(ies) Served	\$ Awarded	Description
Capacity-building	City of Rohnert Park	local government	Sonoma	\$ 75,000	municipal Efficiency Coordinator position
Capacity-building	Santa Clara County	local government	Santa Clara	\$ 75,000	fund Utility Program Manager and Climate Coordinator
Capacity-building	City of Newark	local government	Alameda	\$ 50,000	fund Climate Protection Special Assistant
Capacity-building	City of Sunnyvale	local government	Santa Clara	\$ 55,550	sustainability officer
Capacity-building	City of El Cerrito	local government	Contra Costa	\$ 75,000	municipal energy officer
Capacity-building	City of Novato	local government	Marin	\$ 75,000	county-wide energy officer circuit rider
Capacity-building	San Mateo County	local government	San Mateo	\$ 75,000	municipal energy officer
			<b>Sub-total</b>	<b>\$ 480,550</b>	
Climate Planning	City of San Leandro	local government	Alameda	\$ 40,000	develop local climate action plan
Climate Planning	City of San Rafael	local government	Marin	\$ 25,000	develop local climate action plan
Climate Planning	City of Richmond	local government	Contra Costa	\$ 74,987	integrate climate into general plan
Climate Planning	Napa County Transport. Authority	local government	Napa	\$ 75,000	"circuit rider" for Napa cities and county to do climate plans
Climate Planning	Redwood City	local government	San Mateo	\$ 55,000	develop local climate action plan
Climate Planning	City of Fremont	local government	Alameda	\$ 70,962	integrate climate protection into general plan
Climate Planning	City of Menlo Park	local government	San Mateo	\$ 25,000	develop local climate action plan
Climate Planning	Cities of Albany & Piedmont	local government	Alameda	\$ 55,000	develop local climate action plan for 2 cities
Climate Planning	City of Lafayette	local government	Contra Costa	\$ 75,000	integrate climate protection into new downtown plan
Climate Planning	City of Vallejo	local government	Solano	\$ 75,000	integrate climate into general plan
Climate Planning	City of Mountain View	local government	Santa Clara	\$ 45,130	integrate climate protection into general plan
Climate Planning	City of Benicia	local government	Solano	\$ 40,000	develop local climate action plan
Climate Planning	City of Berkeley	local government	Alameda	\$ 40,000	environmental management system to implement climate plan
Climate Planning	Town of Hillsborough	local government	San Mateo	\$ 69,620	integrate climate protection into general plan
Climate Planning	City of San Mateo	local government	San Mateo	\$ 40,000	community-wide energy education and outreach officer
Climate Planning	Contra Costa County	local government	Contra Costa	\$ 40,000	develop climate action plan
Climate Planning	Alameda County	local government	Alameda	\$ 40,000	develop climate action plan
Climate Planning	City of Oakland	local government	Alameda	\$ 40,000	municipal energy action plan
Climate Planning	City of Hayward	local government	Alameda	\$ 40,000	develop climate action plan
Climate Planning	City of San Carlos	local government	San Mateo	\$ 75,000	integrate climate into general plan
			<b>Sub-total</b>	<b>\$ 1,040,699</b>	
Fostering Innovation	SF Community Power	non-profit	San Francisco	\$ 75,000	community-based carbon-trading experiment
Fostering Innovation	City of Santa Rosa	local government	Sonoma	\$ 43,000	energy efficiency in commercial laundry facilities
Fostering Innovation	City of Santa Rosa	local government	Sonoma	\$ 75,000	biomass from wastewater technology
Fostering Innovation	Urban Releaf	non-profit	Alameda	\$ 75,000	West Oakland tree planting
Fostering Innovation	Marin County	local government	Marin	\$ 75,000	Community Choice Aggregation (CCA)
Fostering Innovation	Water Planet Alliance	non-profit	Marin	\$ 74,438	technical support for Marin CCA
Fostering Innovation	Build It Green	non-profit	Bay Area-wide	\$ 75,000	rating/tracking system for green rated homes
Fostering Innovation	Climate Protection Campaign	non-profit	Sonoma	\$ 75,000	explore getting Sonoma to join Marin's CCA
Fostering Innovation	City of Berkeley	local government	Alameda	\$ 75,000	sustainable energy financing district
Fostering Innovation	TransForm	non-profit	Bay Area wide	\$ 75,000	LEED-type certification program for traffic reduction
Fostering Innovation	ICLEI - Local Govts for Sustainability	non-profit	Bay Area wide	\$ 52,109	early action handbook for GHG reduction
Fostering Innovation	Sustainable Earth Initiative	non-profit	San Francisco	\$ 75,000	fleet management tools
Fostering Innovation	Eco-city Builders	non-profit	Alameda	\$ 73,462	innovative sustainable development in Oakland
			<b>Sub-total</b>	<b>\$ 918,009</b>	

**Climate Protection Grant Awards**

<b>Grant Category</b>	<b>Applicant</b>	<b>Type of Applicant</b>	<b>County(ies) Served</b>	<b>\$ Awarded</b>	<b>Description</b>
Regionalizing Best Practices	Sustainable Silicon Valley	non-profit	San Mateo, Sta Clara	\$ 75,000	packaging and promoting business best practices
Regionalizing Best Practices	City of Sebastopol	local government	Sonoma	\$ 73,360	replicate Solar Sebastopol for all of Sonoma County
Regionalizing Best Practices	Strategic Energy Innovations	non-profit	Marin	\$ 75,000	helping local governments reduce GHGs
Regionalizing Best Practices	Accountable Development Coalition	non-profit	Sonoma	\$ 30,000	promote green building ordinances
Regionalizing Best Practices	Acterra	non-profit	San Mateo	\$ 60,000	neighborhood-based home greening
Regionalizing Best Practices	Sonoma County	local government	Sonoma	\$ 75,000	packaging and training best practices for local governments
			<b>Sub-total</b>	<b>\$ 388,360</b>	
Youth Climate Outreach	Sonoma Ecology Center	non-profit	Sonoma	\$ 25,000	education/training 6th graders to do home EE upgrades
Youth Climate Outreach	Earth Team	non-profit	Alameda, Contra Costa	\$ 22,496	Cool Schools
Youth Climate Outreach	Breathe California	non-profit	Santa Clara	\$ 25,000	trip reduction outreach in 3 schools in Milpitas
Youth Climate Outreach	TransForm	non-profit	Alameda	\$ 24,986	Pollution Punch card in schools to get families to reduce trips
Youth Climate Outreach	Strategic Energy Innovations	non-profit	Marin	\$ 25,000	youth-led energy audits for affordable housing
Youth Climate Outreach	Marin Conservation Corp	non-profit	Marin	\$ 25,000	school-based "cancel-a-car"
Youth Climate Outreach	Solar Living Institute	non-profit	Contra Costa	\$ 24,900	train students to install solar PV
			<b>Sub-total</b>	<b>\$ 172,382</b>	
			<b>TOTAL</b>	<b>\$ 3,000,000</b>	

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 25, 2010

Re: Report of the Executive Committee Meeting of May 24, 2010

RECOMMENDED ACTION

The Committee recommends Board of Directors' approval of:

- A) A Strategic Facilities Planning Ad Hoc Committee; and
- B) Selection of Sonoma Technologies, Inc. (STI) to assist with the development of local emissions inventories to support Community Risk Reduction Plans (CRRPs) and authorize the Executive Officer/APCO to execute a contract with STI not to exceed \$207,200.

BACKGROUND

The Executive Committee met on Monday, May 24, 2010. The Committee received the following reports and updates:

- A) Quarterly Report of the Hearing Board – January 2010 – March 2010;
- B) Update on Video Conferencing;
- C) Strategic Facilities Planning Process Status Report and Consideration to Recommend Establishing a Strategic Facilities Planning Ad Hoc Committee; and
- D) Update on Proposed Revisions to the District's California Environmental Quality Act (CEQA) Guidelines and Selection of a Contractor to Assist with the Development of Local Emissions Inventories to Support Community Risk Reduction Plans (CRRPs)

Attached are the staff reports presented in the Executive Committee packet of May 24, 2010.

Chairperson Brad Wagenknecht will give an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

- A) None;

- B) None;
- C) Commercial Broker services funding for this project has been budgeted and is included in Program 702 of the approved FY 2009/2010 budget. However, the work of the Strategic Facilities Planning Ad Hoc Committee may have significant implications for spending on capital facilities;
- D) Funding for this contract is included in the District's FY 2009/10 budget.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Lisa Harper  
Reviewed by: Jennifer Chicconi

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
 Memorandum

TO: Chairperson Brad Wagenknecht and Members  
 of the Executive Committee

FROM: Chairperson Thomas M. Dailey, M.D., and Members of the Hearing Board

DATE: May 17, 2010

RE: Hearing Board Quarterly Report – January 2010 – March 2010

**RECOMMENDED ACTION:**

This report is provided for information only.

**DISCUSSION:**

<u>COUNTY/CITY</u>	<u>PARTY/PROCEEDING</u>	<u>REGULATION(S)</u>	<u>STATUS</u>	<u>PERIOD OF VARIANCE</u>	<u>ESTIMATED EXCESS EMISSIONS</u>
Alameda/Livermore	WASTE MANAGEMENT OF ALAMEDA COUNTY, INC. (LIVERMORE) - Appeal – Docket No. 3571 - Appeal of Permits to Operate for Facility No. B2066, Waste Management of Alameda County, Inc.'s Altamont Landfill and Resource Recovery Facility.	Condition No. 24421; S-206, S-207, S-208, S209 (Major Facility Review Permit)	Filed Joint Request for Postponement of January 28, 2010 Hearing to February 25, 2010  Filed Order for Dismissal	===	===

**NOTE:** During the first quarter of 2010, the Hearing Board did not hold any hearings. The Clerk filed and processed a Joint Request for Postponement and Order for Dismissal (Docket No. 3571). Hearing Board Vice Chairperson and the Clerk met and compiled updates to the Hearing Board Rules on February 11, 2010. Hearing Board Chairperson Thomas M. Dailey, M.D., presented the Hearing Board fourth Quarter Report at the February 22, 2010 Executive Committee Meeting. Chairperson Dailey and Vice Chairperson Colline were re-appointed to three-year terms of office by the Board of Directors on March 17, 2010. The Hearing Board collected no fees during the first quarter of 2010.

**EXCESS EMISSION DETAILS**

<b><u>COMPANY NAME</u></b>	<b><u>DOCKET NO.</u></b>	<b><u>TOTAL EMISSIONS</u></b>	<b><u>TYPES OF EMISSIONS</u></b>	<b><u>PER UNIT COST</u></b>	<b><u>TOTAL AMT COLLECTED</u></b>
					\$ 0
				<b>TOTAL COLLECTED:</b>	<b><u>\$ 0</u></b>

Respectfully submitted,

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

Prepared by: Lisa Harper  
Reviewed by: Jennifer Chicconi

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Executive Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 24, 2010

Re: Video Conferencing

RECOMMENDED ACTION:

Informational update only.

BACKGROUND

Staff has been researching options to enable the District to broadcast committee meetings via video conferencing to multiple locations. Staff is working to identify potential venues and equipment options.

The current hardware installed at the District is over 4 years old. The system in place is in fair working condition and can support up to three external sites for broadcast.

DISCUSSION

Staff is reviewing possible external locations for our meetings; we are looking for both private and public facilities including colleges, libraries, and county buildings. Additionally, we are considering private conference and meeting spaces, as well as our own satellite offices.

Staff will continue to research options, and provide an update to the Committee with a cost analysis and recommendation at its next meeting.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Satnam Hundel  
Reviewed by: Jack M Colbourn

## BAY AREA AIR QUALITY MANAGEMENT DISTRICT

## Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Executive Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 11, 2010

Re: Strategic Facilities Planning Process Status Report and Consideration to Recommend  
Establishing a Strategic Facilities Planning Ad Hoc Committee

**RECOMMENDED ACTION:**

The Committee will consider recommending that the Board of Directors establish a Strategic Facilities Planning Ad Hoc Committee comprised of the Chair, Vice-Chair and Executive Officer/Directors of the Air District, Metropolitan Transportation Commission (MTC), and Association of Bay Area Government (ABAG).

**BACKGROUND**

On July 29, 2009, the Executive Committee received an overview of the Strategic Facility Planning Process which included an overview of a revised Request for Proposal for Strategic Facilities Planning issued to include Phase I: Visioning Process. The Strategic Facility Planning process is a multi-phased approach that will be instrumental in determining recommendations for improvements.

On November 19, 2009, the Executive Committee received an overview of Phase I of the strategic facility planning process to date. The overview included interview and survey results conducted with Executive Management staff, operational staff, the Board of Directors, the Advisory Council and the Hearing Board; confirmation of co-location discussions; and, next steps.

The Committee provided follow-up direction to staff. The consensus of the Executive Committee was to have staff continue to move forward with plans to relocate the Air District headquarters with the issuance of a Request for Information (RFI) for Commercial Real Estate and Advisory Services followed by the Request for Proposal (RFP) for Commercial Real Estate and Advisory Services.

**DISCUSSION**

The Committee will receive a status report on the progress to date on direction provided to staff at its November 19, 2009 meeting. The report will include the status relative to implementation of recommendations from the San Francisco Department of the Environment on improved energy efficiencies at the Air District headquarters, results of an engineering study conducted on the HVAC systems, as well as the initial selection of a broker based on an RFP issued for Commercial Real Estate Broker and Advisory Services.

The Committee will also consider establishing a Strategic Facilities Planning Ad Hoc Committee comprised of the Chair, Vice-Chair, and Executive Officer/Directors of the Air District, MTC, and ABAG.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

Commercial Broker services funding for this project has been budgeted and is included in Program 702 of the approved FY 2009/2010 budget. However, the work of the Strategic Facilities Planning Ad Hoc Committee may have significant implications for spending on capital facilities.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Mary Ann Okpalaugo  
Approved by: Jack Colbourn

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Wagenknecht and Members  
of the Executive Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 17, 2010

Re: Update on Proposed Revisions to the District's CEQA Guidelines and Selection of a Contractor to Assist with the Development of Local Emissions Inventories to Support Community Risk Reduction Plans (CRRP)

RECOMMENDED ACTION:

Recommend Board of Directors:

- 1) Selection of Sonoma Technologies Inc. (STI) to assist with the development of local emissions inventories to support community risk reduction plans; and
- 2) Authorization for the Executive Officer to execute a contract with STI to assist with the development of local emissions inventories to support community risk reduction plans, the contract for which shall conform with the policies and requirements of the District and shall not exceed \$207,200.

BACKGROUND

The District's CEQA Guidelines provide guidance to local lead agencies conducting air quality analyses pursuant to the California Environmental Quality Act (CEQA). In the ten years since the District last reviewed its recommended CEQA thresholds of significance for air quality, there have been many changes that affect the management of air resources in the Bay Area. The District CEQA Guidelines are being updated to address: 1) more stringent health based ambient air quality standards for ozone and fine particulate matter; 2) greater understanding and concern about public health impacts from localized high exposures to air toxics and fine particulate matter; and, 3) current uncertainty about to how address greenhouse gases in CEQA documents.

The District's Community Air Risk Evaluation (CARE) program has been evaluating localized impacts from sources of toxic air contaminants and fine particulate matter in communities of concern. The District has analyzed various strategies to reduce these impacts throughout the Bay Area and recommends the preparation of community risk reduction plans (CRRP). CRRPs would allow a community-wide approach to reducing emissions of and exposure to toxic air contaminants and fine particulate matter, and would be a collaborative effort between local jurisdictions and the District. CRRPs would also help local jurisdictions to meet their CEQA obligations related to the proposed new significance thresholds for risks and hazard impacts.

The CRRP approach is intended to provide local agencies a proactive alternative to addressing high levels of risk in communities on a project-by-project basis. The goal of a CRRP would be to reduce concentrations of toxic air contaminants and fine particulate matter for the entire community covered by a CRRP to acceptable levels. Staff has developed detailed guidelines for preparing CRRPs as part of the updated CEQA Guidelines; the guidance document is available on the District's website.

The CARE program developed a regional toxic emission and fine particulate matter emission inventory that was used in the initial modeling of Bay Area risks. This inventory was adequate for the large scale modeling performed by the CARE program, however, more fine grained emissions data is needed to move the CARE program forward and to support the concept of CRRPs. On March 18, 2010, the District issued Request for Proposal (RFP) # 2010 – 004: Develop Detailed TAC and PM Emissions Inventory for the Bay Area.

## DISCUSSION

Air District staff has been developing an update to the District's 1999 CEQA Guidelines for the past eighteen months. Staff hosted public workshops for the Guidelines update in February, April and September 2009. Public hearings on the proposed significance thresholds were held by the Board of Directors on November 18 and December 2, 2009, and the Board further discussed the matter at the January 6, and May 5, 2010 meetings.

At the January 6 meeting the Board of Directors directed staff to conduct additional outreach to local agency staff in each of the nine Bay Area counties to improve understanding of the proposed Guidelines update and address issues they may have. In April 2010 staff held an agency staff workshop in each county and two additional public workshops. Staff has also met extensively with city, county, and regional agency staff, local officials, and numerous interested stakeholders. Staff has also developed a variety of technical support tools to assist local staff in understanding and implementing the Guidelines. Staff has scheduled four training sessions during May 2010 on the computer models and other analytical tools that have been developed to implement the Guidelines. Staff is planning to bring the proposed CEQA thresholds back to the Board of Directors for their consideration on June 2, 2010.

The District anticipates the preparation of CRRPs to be a collaborative effort between local jurisdictions and the District. Staff has initiated discussions with several jurisdictions to develop CRRP pilot projects. The District will be providing detailed local emissions inventories of toxic air contaminants and fine PM, computer modeling of local concentrations, and identification of goals and mitigation strategies to be used in CRRPs. In addition, the District is committed to providing financial support of up to \$50,000 in each of the impacted communities identified through the CARE program to offset the costs to local jurisdictions that commit to develop a CRRP.

## **Request for Proposals:**

The March 18, 2010 RFP solicited proposals from qualified consultants to assist the District in developing detailed emissions inventory and modeling parameters for significant sources in the Bay Area. The selected consultant would:

- 1) Develop annual average vehicle and truck volume data and annual average emissions of PM2.5 and TACs for California freeways and major roadways in impacted communities.
- 2) Compile a list of stationary diesel engines and backup generators in the Bay Area and provide operating/modeling parameters with which to estimate health impacts.
- 3) Compile a list of gas online dispensing facilities in the Bay Area and provide operating/modeling parameters for each facility with which to estimate health impact.
- 4) Compile a list of dry cleaners using perchloroethylene in the Bay Area and provide operating/modeling parameters for each facility with which to estimate health impact.
- 5) Identify the top 100 sources of TACs and PM2.5 in the Bay Area based on the 2009 emission inventory excluding dry cleaners, diesel engines, and gas dispensing facilities and develops modeling parameters for each source.
- 6) Develop criteria for identifying significant non-permitted sources, provide a list of significant sources in the impacted communities, and provide a generic methodology for estimating emissions from these sources.
- 7) Develop a methodology for analyzing and estimating emissions from long-term construction projects.

The District mailed or emailed the RFP to prospective consultants and posted it on the District's website. The deadline to submit proposals was April 15, 2010. The procedures used for the RFP comply with the District's Administrative Code Division II, Section 4.6. The Air District received two proposals from; Environ International Corporation; Novato, California; and Sonoma Technology, Inc. (STI), Petaluma, California.

## **Evaluation of Proposal:**

A team comprised of staff from the District's Planning and Research and Engineering Divisions conducted the evaluation and scoring of the proposals based on three main criteria listed in the RFP:

- 1) Technical expertise, clear understanding of the work and its objective, recommended methods to efficiently achieve each tasks, and examples of previous projects that were successful (50%);
- 2) Past experience of the firm and, in particular, experience of the team working on similar data sets for air quality and land use planning and in developing detailed emissions inventories (30%); and
- 3) Cost (20%).

## Scoring Results:

Both of the bidders' proposals indicated a thorough understanding of the scope of work which the consultants would be asked to perform. STI's bid demonstrated a more direct and comprehensive method of evaluating roadway impacts that are consistent with the District's recommended methodology for modeling under CEQA.

STI (Total Bid Not to Exceed \$207,500). STI is currently under contract to the District to complete future year regional inventory for 2015 and 2020 based on the projected emissions reductions from diesel regulations adopted by the California Air Resources Board. STI previously completed the regional modeling dataset for 2005 that was used to identify the CARE impacted communities. **STI had an aggregate score of 207 points for the first two criteria.**

Environ International Corporation (Cost \$305,353). Environ in partnership with Eastern Research Inc. provides experience in emissions data gathering for air modeling support for both public agencies and private companies throughout the State. Environ has worked with the District in providing air quality modeling support, emissions inventory development, and evaluation of meteorological models. However, Environ's recommended approach for this project was deemed to not be the most accurate approach for developing this type of an emission inventory. **Environ had an aggregate score of 186 points for the first two criteria.**

Based on the review team's scoring of the proposals using the first two criteria, and the fact that STI's proposal was significantly lower cost, staff recommends STI be awarded the contract to perform the detailed emissions inventory in support of CRRPs for District.

## BUDGET CONSIDERATION/FINANCIAL IMPACT:

Funding for this contract is included in the District's FY 2009/10 budget.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Virginia Lau  
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Brad Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 27, 2010

Re: Report of the Mobile Source Committee Meeting of May 27, 2010

RECOMMENDED ACTIONS

Recommend that the Board of Directors:

- A) Projects with Proposed Grant Awards Over \$100,000:
1. Approve Transportation Fund for Clean Air (TFCA) Fiscal Year (FY) 2009/2010 projects with proposed grant awards over \$100,000 listed on Attachment 1; and
  2. Authorize the Executive Officer/APCO to enter into agreements for the recommended TFCA FY 2009/2010 projects.
- B) Transportation Fund for Clean Air (TFCA) County Program Manager Expenditure Plans for Fiscal Year (FY) 2010/2011:
1. Approve the allocation of FY 2010/2011 TFCA County Program Manager Funds listed on Table 1; and
  2. Authorize the Executive Officer/APCO to enter into funding agreements with the County Program Managers for the total funds to be programmed in FY 2010/2011, listed on Table 1, consistent with the Board-adopted TFCA Program Manager Fund Policies.
- C) Transportation Fund for Clean Air (TFCA) Regional Fund Policies and Evaluation Criteria for Fiscal Year (FY) 2010/2011 and Proposed Allocations for Specific Project Types:
1. Approve the proposed FY 2010/2011 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A; and
  2. Approve the TFCA Regional Fund set-asides listed below. Any monies not spent in these categories within 12 months will revert back to the TFCA Regional Fund for re-allocation:
    - a. Up to \$4 million for shuttles and rideshare projects; and
    - b. Up to \$600,000 for bicycle facility projects.
- D) Board Resolution in support of an application for California Goods Movement Bond Funding:
1. Adopt a Resolution in support of the Air District's application for Goods Movement Bond funding.

## BACKGROUND

The Mobile Source Committee met on Thursday, May 27, 2010. The Committee received and considered the following reports and recommendations:

- A) Consideration of Projects with Proposed Grant Awards Over \$100,000
- B) Consideration of Transportation Fund for Clean Air (TFCA) County Program Manager Expenditure Plans for Fiscal Year (FY) 2010/2011
- C) Consideration of Proposed Transportation Fund for Clean Air (TFCA) Regional Fund Policies and Evaluation Criteria for Fiscal Year (FY) 2010/2011 and Proposed Allocations for Specific Project Types
- D) Update on Air District Truck Programs
- E) Consideration of proposed Board Resolution in support of an application for California Goods Movement Bond Funding

Attached are the staff reports presented in the Mobile Source Committee packet.

Chairperson, Scott Haggerty will give an oral report of the meeting.

## BUDGET CONSIDERATION/FINANCIAL IMPACT

- A) None. Through the Carl Moyer Program (CMP) 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. TFCA allocations do not impact the District’s general fund or operating budget. TFCA County Program Manager revenues are generated from a dedicated outside funding source and are passed through to County Program Managers.
- C) None. The Air District distributes “pass-through” funds to public agencies and private entities on a reimbursement basis. Administrative costs for the TFCA Regional Fund program is provided by the funding source.
- D) None.
- E) None.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Lisa Harper  
Reviewed by: Jennifer Chicconi

Attachment(s)

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: May 20, 2010

Re: Consideration of Projects with Proposed Grant Awards Over \$100,000

---

RECOMMENDATIONS

Recommend Board of Directors:

1. Approve Transportation Fund for Clean Air fiscal year (FY) 2009/2010 projects with proposed grant awards over \$100,000 listed on Attachment 1.
2. Authorize the Executive Officer/APCO to enter into agreements for the recommended TFCA FY 2009/2010 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 (NO<sub>x</sub>), 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 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.

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

### **TFCA:**

On May 5, 2009, the Board of Directors allocated \$5 million for Alternative Fuel Vehicle and Infrastructure Projects for FY 09/10. The Air District opened the call for Alternative Fuel Vehicle and Infrastructure Projects on October 28, 2009, and as of May 12, 2010, had received 29 grant applications requesting more than \$3.3 million for alternative fuel related projects.

On May 5, 2009, the Board of Directors also allocated \$2 million for Advanced Technology Demonstration projects. The Air District opened the call for Advanced Technology Demonstration projects on March 15, 2010 and as of May 12, 2010, had received 8 grant applications requesting more than \$2.4 million for advanced technology demonstration projects.

Of the applications that have been evaluated between January 16, 2010 and May 12, 2010, two eligible projects have individual grant awards over \$100,000. Attachment 1 lists the two projects that staff recommends be awarded grants for an aggregate of \$678,803 in TFCA funding. Attachment 2 lists all the FY 09/10 TFCA Regional Fund projects that have been awarded funding as of May 12, 2010, and summarizes the allocation of funding by equipment category (Figure 1), and county (Figure 2).

More than 33% of the TFCA funds allocated to eligible projects have been awarded to projects that reduce surplus emissions in highly impacted Bay Area communities.

### **Carl Moyer:**

No CMP applications requesting individual grant awards over \$100,000 received between February 11, 2010, and May 12, 2010, are being forwarded for approval.

## BUDGET CONSIDERATION / FINANCIAL IMPACT

None. Through the CMP 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: Michael Neward and Karen Schkolnick  
Reviewed by: Damian Breen

Attachment 1: Recommended FY 09/10 TFCA Regional Fund projects with individual grant awards greater than \$100,000

Attachment 2: Summary of FY 09/10 TFCA Regional Fund approved projects (as of 5/12/10)

**ATTACHMENT 1: Recommend FY 09/10 TFCA Regional Fund Projects with Grant Awards Greater Than \$100k (as of 5/12/10)**

Project #	Project Sponsor	Project Title and Type	TFCA \$ Awarded	CO2 (TPY)	NOX (TPY)	ROG (TPY)	PM (TPY)	C/E	Score	AB 130 Designation	County
09R17	Santa Clara Valley Industries	(11) Compressed Natural Gas Refuse Trucks  (Alternative Fuel Vehicle and Infrastructure project)	\$275,000	46.22	2.20	-	-	\$41,656	71%	Not AB1390	Santa Clara
09R44	Pacific Gas & Electric	(46) E-PTO Hybrid Utility Trucks Demonstration  (Advanced Technology Demonstration project)	\$403,803	1,011.88	.84	.02	.01	\$159,900	76%	Not AB1390	Contra Costa
<b>2 Projects</b>			<b>\$678,803</b>	<b>1,058.10</b>	<b>3.04</b>	<b>0.02</b>	<b>0.01</b>				

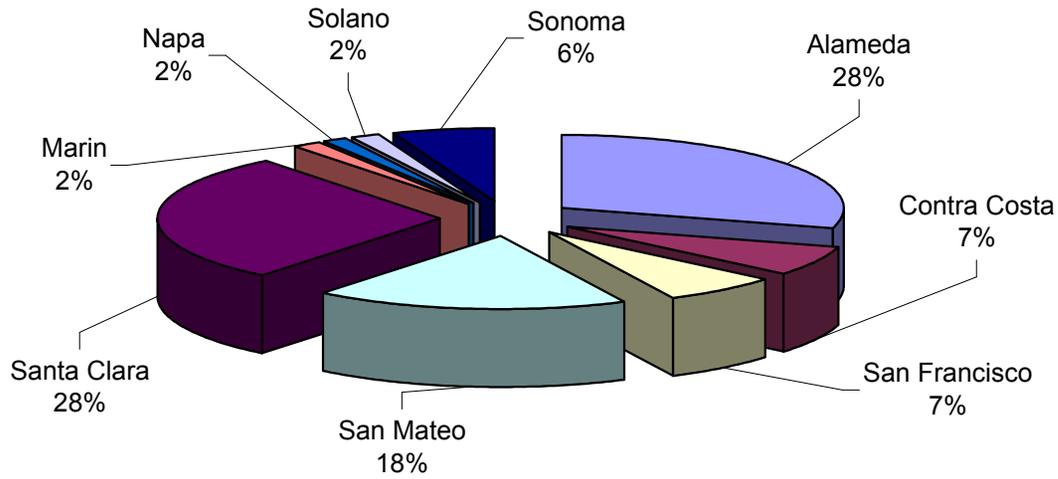
**ATTACHMENT 2: Summary of FY 09/10 TFCA Approved Projects (as of 5/12/10)**

Project #	Project Sponsor	Project Title	TFCA \$ Awarded	CO2	NOX	ROG	PM	Score %	Board Approval Date	County	Project Type
09R15	Clean Energy	Liquefied Natural Gas Station	\$200,000	28.40	0.30	0.02	-	69%	2/3/10	Alameda	Alt Fuel
09R16	County of Santa Clara	Compressed Natural Gas Station & (3) CNG Sedans	\$204,105	36.15	0.29	0.03	-	67%	2/3/10	Santa Clara	Alt Fuel
09R20	Mission Trail Waste Systems	(23) Compressed Natural Gas Refuse Trucks	\$426,503	171.05	3.84	1.92	-	75%	2/3/10	Santa Clara	Alt Fuel
09R21	Oakland Port Services Corp., dba AB Trucking	(6) Natural Gas Port Trucks	\$297,000	97.95	1.10	-	-	71%	2/3/10	Alameda	Alt Fuel
09R25	WM of Alameda County, Inc.	(31) Compressed Natural Gas Refuse Trucks	\$500,000	683.35	8.40	-	-	91%	2/3/10	Alameda	Alt Fuel
09R18	County of Santa Clara	(1) Compressed Natural Gas Security Transfer Bus	\$36,000	20.69	0.08	-	-	77%	APCO	Santa Clara	Alt Fuel
09R19	Livermore Sanitation	(3) Compressed Natural Gas Refuse Trucks	\$73,497	20.50	0.23	-	-	74%	APCO	Alameda	Alt Fuel
09R22	Sonoma County Transit	(2) Compressed Natural Gas Transit Buses	\$80,000	62.57	0.58	-	-	81%	APCO	Sonoma	Alt Fuel
09R23	South SF Scavenger., INC	(4) Compressed Natural Gas Refuse Trucks	\$80,000	24.87	0.28	-	-	76%	APCO	San Mateo	Alt Fuel
09R24	UC Davis Fleet	(1) Compressed Natural Gas Bus	\$41,350	10.93	0.09	-	-	61%	APCO	ALA, CC, SOL	Alt Fuel
09R26	Yellow Cab/Clean Energy Finance	(25) Compressed Natural Gas Taxis	\$75,000	-	0.11	0.19	-	82%	APCO	San Francisco	Alt Fuel
09R27	Breathe California for Silicon Valley Clean Cities	US Department of Energy - Clean Cities Coalition Outreach (SV)	\$25,000	9.72	0.04	0.02	-	72%	APCO	9 County	Alt Fuel
09R28	East Bay Clean Cities Coalition	US Department of Energy - Clean Cities Coalition Outreach (EB)	\$25,000	9.72	0.04	0.02	-	72%	APCO	9 County	Alt Fuel
09R29	SF Environment	US Department of Energy - Clean Cities Coalition Outreach (SF)	\$25,000	18.93	0.13	0.02	-	72%	APCO	9 County	Alt Fuel
09R30	Better Place	(30) Electric Vehicle Charge Points	\$30,000	101.31	0.00	0.00	0.00	77%	APCO	Santa Clara	Alt Fuel
09R31	City of Palo Alto	(6) Electric Vehicle Charge Points	\$12,000	20.26	0.00	0.00	0.00	68%	APCO	Santa Clara	Alt Fuel
09R32	City & County of San Francisco	(60) Electric Vehicle Public Garage Charge Points	\$100,000	202.62	0.03	0.04	0.01	84%	APCO	San Francisco	Alt Fuel
09R33	City of Santa Rosa	(14) Plug-in Hybrid Electric Vehicle conversions & (20) Electric Vehicle Charge Points	\$45,811	10.54	0.00	0.00	0.00	71%	APCO	Sonoma	Alt Fuel
09R35	County of Santa Clara	(40) Electric Vehicle Charge Points	\$85,720	135.08	0.02	0.03	0.00	75%	APCO	Santa Clara	Alt Fuel
09R36	County of Sonoma	(30) Plug-in Hybrid Electric Vehicle Conversions & Electric Vehicle Charge Points	\$81,173	35.89	0.00	0.00	0.00	69%	APCO	Sonoma	Alt Fuel
09R37	County of Alameda	(15) Hybrid Vehicles & (4) NEV	\$43,816	2.29	0.01	0.02	0.00	66%	APCO	Alameda	Alt Fuel
09R39	County of Alameda	(40) Electric Vehicle Charge Points	\$84,760	135.07	0.02	0.03	0.00	72%	APCO	Alameda	Alt Fuel
09R40	Friendly Cab	(20) Ford Escape Hybrids	\$80,000	220.66	0.04	0.06	0.01	81%	APCO	Alameda	Alt Fuel
09R41	City of Palo Alto	(1) Medium Duty Vehicle	\$16,000	-	0.00	0.00	0.00	60%	APCO	San Mateo	Alt Fuel
09R42	City of Palo Alto	(1) Heavy Duty Vehicle Purchase	\$77,000	4.40	0.12	0.00	-	60%	APCO	San Mateo	Alt Fuel
09R43	East Bay Regional Parks	(3) Medium Duty Vehicle Purchase	\$24,000	-	0.00	-	0.00	68%	APCO	San Mateo	Alt Fuel

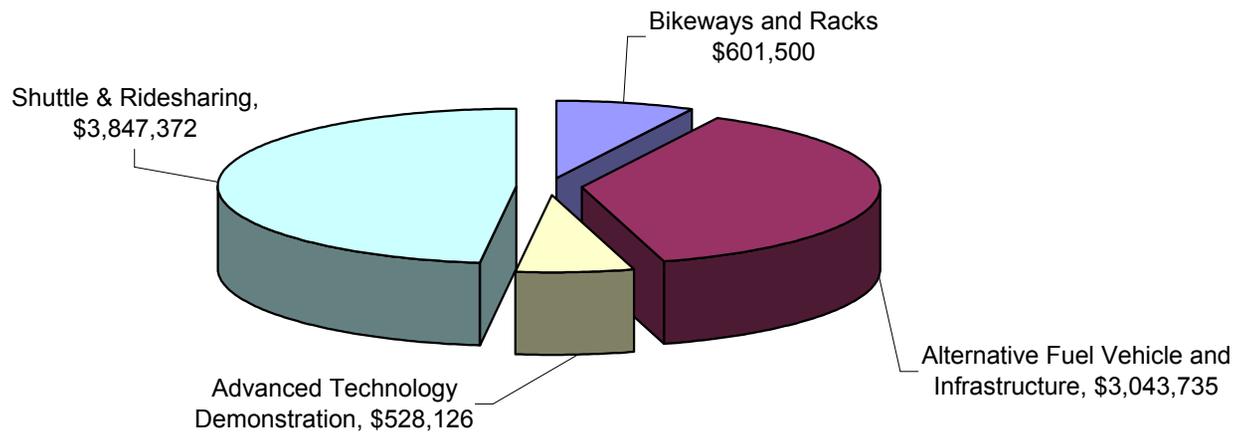
**ATTACHMENT 2: Summary of FY 09/10 TFCA Approved Projects (as of 5/12/10)**

Project #	Project Sponsor	Project Title	TFCA \$ Awarded	CO2	NOX	ROG	PM	Score %	Board Approval Date	County	Project Type
09R44	City CarShare	New Plug In 10kwh conversion	\$27,600	110.55	0.00	0.00	0.00	71%	APCO	San Francisco	ATD
09R45	Devine Intermodal	(1) Heavy Duty Vehicle Purchase - Hydrogen	\$96,723	146.68	0.19	0.01	0.00	71%	APCO	Alameda	ATD
09BFP02	City of Oakland	Class II and III Bikeways on 14th Street, MacArthur Boulevard, and Fruitvale Avenue	\$57,000	n/a	n/a	n/a	n/a	n/a	APCO	Alameda	Bike
09BFP03	City of Daly City	Southgate Avenue Class II Bicycle Lane Gap Closure	\$25,500	n/a	n/a	n/a	n/a	n/a	APCO	San Mateo	Bike
09BFP04	City of Petaluma	Class III Bicycle Routes in Petaluma	\$103,311	n/a	n/a	n/a	n/a	n/a	APCO	Sonoma	Bike
09BFP05	City of San Carlos	Class III Bicycle Route on Old County Road	\$18,150	n/a	n/a	n/a	n/a	n/a	APCO	San Mateo	Bike
09BFP06	City of San Jose	San Jose Citywide Bicycle Racks Installation	\$14,880	n/a	n/a	n/a	n/a	n/a	APCO	Santa Clara	Bike
09BFP10	City of Santa Rosa Department of Public Works	Class II Bicycle Lane on Coffey Lane	\$23,100	n/a	n/a	n/a	n/a	n/a	APCO	Sonoma	Bike
09BFP12	San Francisco Municipal Transportation Agency	San Francisco Citywide Bicycle Racks Installation	\$84,000	n/a	n/a	n/a	n/a	n/a	APCO	San Francisco	Bike
09BFP13	San Francisco Municipal Transportation Agency	Class II Bicycle Lane on John Muir Drive	\$66,900	n/a	n/a	n/a	n/a	n/a	APCO	San Francisco	Bike
09BFP15	San Francisco Municipal Transportation Agency	Class II Bicycle Lane on Great Highway/Point Lobos Avenue	\$15,300	n/a	n/a	n/a	n/a	n/a	APCO	San Francisco	Bike
09BFP16	Alameda County Public Works Agency	Class II Bicycle Lane on Greenville Road	\$30,000	n/a	n/a	n/a	n/a	n/a	APCO	Alameda	Bike
09BFP17	Alameda County Public Works Agency	Class II Bicycle Lane on Foothill Boulevard	\$67,859	n/a	n/a	n/a	n/a	n/a	APCO	Alameda	Bike
09BFP18	Alameda County Public Works Agency	Class II Bicycle Lane on Marina Avenue	\$85,000	n/a	n/a	n/a	n/a	n/a	APCO	Alameda	Bike
09R06	City of Oakland	Class II and III Bikeways on E.12th Street	\$10,500	n/a	n/a	n/a	n/a	n/a	APCO	Alameda	Bike
09R05	Santa Clara Valley Transportation Authority	ACE Shuttle Bus Program	\$960,000	7,242.80	6.09	5.32	3.68	79%	2/3/10	Santa Clara	S-RS
09R06	San Joaquin Regional Rail Commission	ACE Shuttle - Route 54	\$50,000	950.10	0.71	0.75	0.51	77%	2/3/10	Alameda	S-RS
09R07	San Joaquin Regional Rail Commission	ACE Shuttle - Route 53	\$44,000	318.00	0.31	0.27	0.18	65%	2/3/10	Alameda	S-RS
09R08	Metropolitan Transportation Commission	511 Rideshare Program	\$1,050,000	29,410.00	24.75	22.29	14.88	84%	2/3/10	9 County	S-RS
09R09	Livermore Amador Valley Transit Authority	Route 1A/B BART Shuttle	\$59,750	143.80	0.23	0.24	0.11	60%	2/3/10	Alameda	S-RS
09R10	Associated Students, San Jose State University	SJSU Ridesharing and Trip Reduction	\$120,000	1,213.70	1.07	1.02	0.62	79%	2/3/10	Santa Clara	S-RS
09R11	Peninsula Corridor Joint Powers Board	Caltrain Shuttle	\$1,000,000	5,811.30	4.62	4.90	3.04	76%	2/3/10	San Mateo	S-RS
09R12	City of Redwood City	Redwood City Commuter Shuttle	\$15,000	142.00	0.11	0.10	0.07	93%	2/3/10	San Mateo	S-RS
09R13	San Francisco General Hospital	SFGH Pilot Shuttle	\$50,122	416.80	0.44	0.41	0.24	94%	2/3/10	San Francisco	S-RS
09R14	City of Oakland	Oakland Waterfront - Uptown Pilot Shuttle	\$498,500	1,980.40	1.80	1.75	1.01	85%	2/3/10	Alameda	S-RS
<b>Total</b>			<b>\$7,341,930</b>	<b>49,949.06</b>	<b>56.09</b>	<b>39.45</b>	<b>24.37</b>				

### FY 09/10 TFCA Funds Awarded - By County \*



### FY 09/10 TFCA Funds Awarded - By Project Type \*



\* Includes all projects listed on Attachments 1 and 2.

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: May 17, 2010

Re: Consideration of Transportation Fund for Clean Air (TFCA) County Program  
Manager Expenditure Plans for Fiscal Year (FY) 2010/2011

---

RECOMMENDED ACTIONS

Recommend Board of Directors:

1. Approve the allocation of FY 2010/2011 TFCA County Program Manager Funds listed on Table 1; and
2. Authorize the Executive Officer/APCO to enter into funding agreements with the County Program Managers for the total funds to be programmed in FY 2010/2011, listed on Table 1, consistent with the Board-adopted TFCA Program Manager Fund Policies.

BACKGROUND

Pursuant to California Health and Safety Code Sections 44241 and 44242, the Bay Area Air Quality Management District (Air District) receives a \$4 per vehicle annual surcharge on all motor vehicles registered within its boundaries. The revenues fund the implementation of transportation control measures and mobile source control measures. By law, the Air District provides 40% of the revenues generated by this surcharge to the TFCA County Program Manager Fund. Each county in the Air District's jurisdiction is eligible to receive a portion of this funding based on the fees raised in that county and has the ability to designate a County Program Manager (CPM) to expend this funding. CPMs submit to the Air District an annual expenditure plan application specifying funding for air quality projects. These expenditure plans are governed by TFCA County Program Manager Fund Policies. The Policies for FY 2010/2011 were adopted by the Air District's Board of Directors on February 3, 2010.

DISCUSSION

The Air District issued the TFCA FY 2010/2011 Program Manager Expenditure Plan Application Guidance to County Program Managers on February 8, 2010. The deadline for applications was March 31, 2010, and all nine CPMs submitted compliant applications.

Table 1 below lists the recommended expenditure plan amounts. The amount in the second column in the table is the estimated *new* TFCA Program Manager funding available for allocation in FY 2010/2011. This estimate is based on receipts for that county from the Department of Motor Vehicles from the previous 12 months. The third column in the table is the total estimated funding available for programming in each county for FY 2010/2011. This amount includes interest earned and any reported funds available for reprogramming from projects that were completed under budget or canceled in the previous fiscal year.

**Table 1: Estimated Funding for County Program Managers for FY 2010/2011**

<b>County Program Manager</b>	<b>Est. New TFCA Funds for FY 2010/2011</b>	<b>Est. Total Funds to be Programmed in FY 2010/2011 (New + Interest + Reprogrammed Funds)</b>
Alameda County Congestion Mgt. Agency	\$1,732,955.72	\$1,961,348.96
Contra Costa Transportation Authority	\$1,275,147.13	\$1,282,213.51
Transportation Authority of Marin	\$333,898.47	\$445,843.97
Napa County Transportation Planning Agency	\$182,435.15	\$265,078.75
Santa Clara Valley Transportation Agency	\$2,145,403.06	\$2,149,662.74
San Francisco County Transportation Authority	\$665,195.20	\$836,419.77
San Mateo City/County Association of Gov'ts	\$957,282.13	\$1,004,153.13
Solano Transportation Authority	\$286,154.83	\$293,929.76
Sonoma County Transportation Authority	\$555,894.08	\$574,931.25

**BUDGET CONSIDERATION/FINANCIAL IMPACT**

None. TFCA allocations do not impact the District's general fund or operating budget. TFCA County Program Manager revenues are generated from a dedicated outside funding source and are passed through to County Program Managers.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: David Wiley  
Reviewed by: Damian Breen

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: May 20, 2010

Re: Proposed Transportation Fund for Clean Air Regional Fund Policies and  
Evaluation Criteria for Fiscal Year (FY) 2010/2011 and Proposed Allocations for  
Specific Project Types

---

RECOMMENDED ACTIONS

Recommend Board of Directors:

- 1) Approve the proposed Fiscal Year 2010/2011 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A;
- 2) Approve the TFCA Regional Fund set-asides listed below. Any monies not spent in these categories within 12 months will revert back to the TFCA Regional Fund for re-allocation:
  - a. Up to \$4 million for shuttles and rideshare projects; and
  - b. Up to \$600,000 for bicycle facility projects.

BACKGROUND

Each year, the Air District's Board of Directors adopts policies and evaluation criteria that govern the allocation of TFCA funds. On April 1, 2010, Air District staff issued a request for comments on proposed TFCA Regional Fund policies and evaluation criteria for FY 2010/2011. The deadline for interested parties to submit comments was May 3, 2010. The Air District received six responses. A table summarizing the comments and Air District staff responses is provided in Attachment B.

DISCUSSION

The proposed FY 2010/2011 TFCA Regional Fund Policies include project specific policies for Shuttle, Ridesharing and Bicycle Facility projects. Other project types (i.e. alternative fuel vehicle, advanced technology demonstration, etc.) will be proposed for Board approval later this calendar year. This phased-in approach provides increased flexibility for the program and additional time to work with partners from public and private entities to ensure the broadest range of projects are eligible for funding.

Proposed changes to the TFCA Regional Fund Policies and Evaluation Criteria for FY 2010/2011 include:

- Further streamlining to align TFCA evaluation criteria with other District incentive programs (e.g.: ongoing calls for projects; removal of TFCA Regional Fund points system; set asides for projects in impacted communities, with greenhouse gas benefits and in priority development areas, etc.)
- Re-integration of the Bicycle Facility Program into the TFCA Regional Fund program to streamline administration and to allow bicycle projects to be funded directly through the TFCA Regional Fund;
- Extension of the existing requirement of matching funds for projects greater than \$150,000 to all projects in order to maximize funding distribution.

The proposed TFCA Regional Fund Policies and Evaluation Criteria for FY 2010/2011 are provided in Attachment A. Comments and responses for the proposed changes in the Policies and Evaluation Criteria are provided in Attachment B. Attachment C provides a comparison between the proposed TFCA Regional Fund Policies and Evaluation Criteria for FY 2010/2011 and the FY 2009/2010 Board approved version.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District distributes “pass-through” funds to public agencies and private entities on a reimbursement basis. Administrative costs for the TFCA Regional Fund program is provided by the funding source.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Avra Goldman and Deepti Jain  
Reviewed by: Karen Schkolnick

Attachment A: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FY 2010/2011

Attachment B: Comments and Responses for the Proposed Changes in FY 2010/2011 Policy’s and Evaluation Criteria

Attachment C: Redlined (tracked changes version) TFCA Regional Fund Policies and Evaluation Criteria for FY 2010/2011

## TFCA REGIONAL FUND POLICIES AND EVALUATION CRITERIA FOR FY 2010/2011

The following policies apply to the Transportation Fund for Clean Air (TFCA) Regional Fund.

### BASIC ELIGIBILITY

1. **Eligible Projects:** Only projects that result in the reduction of motor vehicle emissions within the Air District’s jurisdiction are eligible.

Projects must conform to the provisions of the California Health and Safety Code (HSC) sections 44220 et seq. and Air District Board of Directors adopted TFCA Regional Fund Policies and Evaluation Criteria for FY 2010/11.

Projects must achieve surplus emission reductions, that is, beyond what is currently required through regulations, contracts, or other legally binding obligations at the time the Air District Board of Directors approves a funding allocation and at the time of the execution of a funding agreement.

2. **TFCA Cost-Effectiveness:** Unless otherwise noted below, projects must meet a cost-effectiveness (C-E) of \$90,000 per ton. Cost-effectiveness is based on the ratio of TFCA funds awarded divided by the sum total tons of reactive organic gases (ROG), oxides of nitrogen (NO<sub>x</sub>), and weighted particulate matter 10 microns in diameter and smaller (PM<sub>10</sub>) reduced (\$/ton).

Certain project categories further specify the eligible funding amount per item (for example, \$/vehicle) which is based on the cost-effectiveness levels below.

Project Type	Policy #	C-E Level Maximum (\$/weighted ton)
Reserved	21	
Reserved	22	
Reserved	23	
Reserved	24	
Reserved	25	
Reserved	26	
Shuttle/Feeder Bus Service—Existing	27	\$90,000
Shuttle/Feeder Bus Service—Pilot	27	\$125,000
Regional Ridesharing	28	\$90,000
Bicycle Facility- Bicycle Lanes and Paths	29	See policy 29 for award amounts
Bicycle Facility –Bicycle Lockers/Racks	30	See policy 30 for award amounts

3. **Consistent with Existing Plans and Programs:** All project categories must comply with the transportation control measures and mobile source measures included in the Air District's most recently approved strategy(ies) for State and national ozone standards and, when applicable, with other adopted State, regional, and local plans and programs.
4. **Eligible Recipients and Authority to Apply:** Grant recipients must be responsible for the implementation of the project, have the authority and capability to complete the project, and be an applicant in good standing.
  - a. **Eligible Recipients:**
    - i. **Public agencies** are eligible to apply for all project categories.

- ii. **Non-public entities** are only eligible to apply for new alternative-fuel (light, medium, and heavy-duty) vehicle projects, and advanced technology demonstrations, as described in HSC section 44241(b)7.
  - b. **Authority to Apply:** Applications must include either: 1) a signed letter of commitment from an individual with authority to enter into a funding agreement and carry out the project (e.g., Chief Executive or Financial Officer, Executive Director, City Manager, etc.), or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, Board of Directors, etc.) authorizing the submittal of the application and identifying the individual authorized to submit and carry out the project.
5. **Viability Project and Matching Funds:** Unless otherwise specified in the project category policies below, applications must provide matching funds from a non-Air District source, which equal or exceed at least 10% of the total project cost.
- Applications must identify sufficient resources to complete the respective project. The project sponsor shall not enter into a TFCA Regional Fund funding agreement until all non-Air District funding has been approved and secured.
6. **Minimum Grant Amount:** \$10,000 per project.
  7. **Maximum Grant Amount:** Maximum award per calendar year:
    - a. **Each public agency** may be awarded up to \$1,500,000, and
    - b. **Each non-public entity** may be awarded up to \$500,000.
  8. **Readiness:** Projects must commence in calendar year 2011 or sooner. For purposes of this policy, “commence” means to receive delivery of vehicles, equipment, services, or to award a construction contract.
  9. **Maximum Two Years Operating Costs:** Projects that provide a service, such as ridesharing programs and shuttle and feeder bus projects, are eligible to apply for a period of up to two (2) years.
  10. **Project Revisions:** Project revisions initiated by the project sponsor which significantly change the project before the allocation of funds by the Air District Board of Directors may not be accepted. Following Air District Board of Directors allocation of funds for a project, an applicant may request revisions to that project that the applicant deems necessary or advisable, based on information the applicant received after the Board’s allocation of funding. The Air District will consider only requests that are based on new information, are within the same eligible project category, and meet the same cost-effectiveness.

#### **APPLICANT IN GOOD STANDING**

11. **In Compliance with Agreement Requirements:** Project sponsors who have failed to meet project implementation milestones or who have failed to fulfill monitoring and reporting requirements for any project funded by the Air District may not be considered eligible for new funding until such time as all of the unfulfilled obligations are met.
12. **Failed Audit:** Project sponsors who have failed either a fiscal audit or a performance audit for a prior Air District funded project will be excluded from future funding for five (5) years. Additionally, project sponsors with open projects will not be reimbursed for those projects until all audit recommendations and remedies have been satisfactorily implemented. A failed fiscal audit means an uncorrected audit finding that confirms an ineligible expenditure of funds. A failed performance audit means that a project was not implemented as set forth in the project funding agreement

- 13. Signed Funding Agreement:** Only a fully executed funding agreement (i.e., signed by both the project sponsor and the Air District) constitutes the Air District's award of funds for a project. The Air District Board of Directors approval of an application does not constitute a final obligation on the part of the Air District to fund a project.

Project sponsors must sign a funding agreement within 60 days from the date it has been transmitted to them in order to remain eligible for award of TFCA funds. The Air District may authorize an extension of up to a total period of 120 days from the transmittal because of circumstances beyond project sponsor's reasonable control and at the Air District's discretion.

Project sponsors who failed to return a funding agreement from a previous funding cycle are not eligible to apply for a 12-month period.

- 14. Insurance:** Each project sponsor must maintain general liability insurance and such additional insurance that is appropriate for specific projects, with coverage amounts specified in the respective funding agreements.

## **INELIGIBLE PROJECTS**

- 15. Planning Activities:** Feasibility studies are not eligible for funding, nor are projects that only involve planning activities and that do not include an implementation phase. In addition, land-use projects (i.e., Smart Growth, Traffic Calming, and Arterial Management) that have not completed the Preliminary Design phase are not eligible.
- 16. Cost of Developing Proposals and Grant Applications:** The costs to develop proposals or prepare applications are not eligible for TFCA funding.
- 17. Duplication:** Projects that have previously received TFCA funds and therefore do not achieve additional emission reductions are not eligible.

Combining TFCA County Program Manager Funds with TFCA Regional Funds to achieve greater emission reductions for a single project is not considered project duplication.

## **USE OF TFCA FUNDS**

- 18. Combined Funds:** TFCA County Program Manager Funds may be combined with TFCA Regional Funds for the funding of an eligible project. For the purpose of calculating the TFCA cost-effectiveness (Regional Fund Evaluation Criterion #1), the combined sum of TFCA County Program Manager Funds and TFCA Regional Funds shall be used to calculate the TFCA cost of the project.
- 19. Administrative Costs:** Administrative costs (i.e., the costs associated with administering a TFCA grant) are limited to a maximum of five percent (5%) of total TFCA funds expended on a project. To be eligible for reimbursement, administrative costs must be clearly identified in the application project budget and in the funding agreement between the Air District and the project sponsor.
- 20. Expend Funds within Two Years:** Project sponsors must expend the awarded funds within two (2) years of the effective date of the funding agreement, unless a longer period is formally (i.e., in writing) approved in advance by the Air District in a funding agreement or as an amendment to the funding agreement.

## **ELIGIBLE PROJECT CATEGORIES:**

### **CLEAN AIR VEHICLE PROJECTS**

- 21. Reserved.**
- 22. Reserved.**

- 23. **Reserved.**
- 24. **Reserved.**
- 25. **Reserved.**
- 26. **Reserved.**

### **SHUTTLE/FEEDER BUS SERVICE PROJECTS**

- 27. **Shuttle/Feeder Bus Service:** Shuttle/feeder bus service projects are those requesting funds to operate a shuttle or feeder bus route to or from a rail station, airport, or ferry terminal. To be eligible, shuttle/feeder bus service schedules must be coordinated with connecting rail or ferry schedules.

Shuttle/feeder bus service applicants must either: a) be a public transit agency or, b) submit documentation from the General Manager of the transit agency that provides service in the area of the proposed shuttle route, which demonstrates that the proposed shuttle service does not duplicate or conflict with existing transit agency service.

All vehicles used in shuttle/feeder bus service must meet the applicable CARB standards for public transit fleets use one of the following types of shuttle/feeder bus vehicles:

- a. An alternative fuel vehicle (e.g. compressed natural gas, liquefied natural gas, propane, electric);
- b. A hybrid-electric vehicle;
- c. A post-1997 diesel vehicle with a CARB Verified Diesel Emission Control Strategy (e.g., retrofit);  
or
- d. A post-1989 gasoline-fueled vehicle.

Pilot shuttle/feeder bus service projects are required to meet a cost-effectiveness of \$125,000/ton during the first two years of operation (see Policy #2). Pilot projects are defined as new routes that are at least 70% unique and have not been in operation in the past five years.

Pilot shuttle/feeder project applicants must provide data supporting the demand for the service, letters of support from potential users and providers, and plans for financing the service in the future.

### **RIDESHARING PROJECTS**

- 28. **Regional Ridesharing Projects:** For TFCA Regional Fund eligibility, ridesharing projects must be comprised of riders from at least three Bay Area counties. Applications for projects that provide a direct or indirect financial transit or rideshare subsidy exclusively to employees of the project sponsor are not eligible. Ride matching services must be coordinated with Metropolitan Transportation Commission's regional ridesharing program.

### **BICYCLE FACILITY PROJECTS**

- 29. **Bikeways – Paths Lanes & Routes**

#### **Bikeway projects include new:**

- a. **Class I Bicycle Paths:** provide a separated right of way for the exclusive use of bicycles and pedestrians, in which motorized vehicles are prohibited and crossings by pedestrians and automobiles are minimized.
- b. **Class II Bicycle Lanes:** paved, on-road bikeways that separate bicyclists from vehicle traffic by a striped lane dedicated for one-way bicycle travel. Grant funding amounts for Continuous Construction and Standard Class-2 Bicycle Lanes may not be combined for the same segment.

- i. Class-2 Bicycle Lane (**Continuous Construction**) – must entail physical improvements (e.g., non-maintenance paving or the widening of a roadway shoulder) continuously over the length of the segment.
- ii. Class-2 Bicycle Lane (**Standard**) –includes project elements other than Continuous Construction, such as striping, marking and loop detectors.
- c. **Class III Bicycle Routs:** indicate a preferred route for bicycle travel that is shared with motor vehicles. They follow roadways where traffic is relatively light and potential conflicts between bicycles and vehicles can be minimized. Street markings, traffic calming devices and barriers are eligible elements of a Class III project.

**Project-specific requirements:**

Projects must be included in an adopted countywide bicycle plan, Congestion Management Program (CMP), or the Metropolitan Transportation Commission’s Regional Bicycle Plan.

Projects must, where applicable, be consistent with design standards published in Chapter 1000 of the California Highway Design Manual.

Bikeway projects must:

- a. Reduce vehicle trips made for utilitarian purposes (e.g., work or school commuting), and
- b. Be one of the following:
  - i. Within one-half mile of at least three major activity centers (e.g., transit stations, office complexes, schools), or
  - ii. Provide a gap closure (e.g., a bridge over a roadway) in, or an extension to, an existing bicycle network that already services three major activity centers. The new segment must be within three contiguous bikeway miles of the requisite activity centers. Gap closure projects may apply for TFCA funding under the Smart Growth project type as well.

Pre and post-project bicycle counts must be conducted and reported for bikeways projects that are awarded more than \$100,000, in TFCA funds.

TFCA funding is limited to a maximum award amount of \$120,000 per project. Maximum funding amounts listed below are based on bikeways going in two directions; a bikeway going in a single direction would qualify for only one-half the stated amount\*.

**Maximum funding amounts per project type:**

Project Type	Maximum \$ per Two-Way Segment*
Class-1 Bicycle Path	\$115,000 per mile of path
Class-2 Bicycle Lane – Continuous Construction	\$ 85,000 per mile of roadway
Class-2 Bicycle Lane – Standard	\$ 30,000 per mile of roadway
Class-3 Bicycle Route	\$ 15,000 per mile of route

**30. Bicycle Parking**

**Bicycle Parking projects include new:**

- a. Bicycle racks (including those on streets, sidewalks, vehicles and vessels);
- b. Electronic and mechanical (including retrofit from mechanical to electronic) bicycle lockers; and
- c. Secure bicycle parking (including bicycle cages and parking stations).

**Project-specific requirements:**

Projects must be included in an adopted countywide bicycle plan, Congestion Management Program (CMP), or the Metropolitan Transportation Commission’s Regional Bicycle Plan.

Specific locations for racks and lockers must be identified in applications for funding.

Stationary bicycle parking projects (including racks, lockers, cages, and parking stations) must be located at a major activity center (e.g., transit station, shopping center, office building, or school).

User data must be collected and reported for electronic bicycle locker projects that are awarded more than \$25,000, in TFCA funds.

TFCA funding is limited to a maximum award amount of \$120,000 per project.

**Maximum funding amounts per project type:**

<b>Project Type</b>	<b>Maximum \$ per Unit</b>
Bicycle Locker(s) – Electronic	\$ 2,500 per locker
Bicycle Locker(s) – Retrofit mechanical to electronic	\$ 650 per retrofit kit
Bicycle Locker(s) – Mechanical	\$ 900 per locker
Bicycle Rack(s)	\$ 60 per bicycle accommodated
Bicycle Rack(s) on Vehicles	\$ 750 per rack
Secure Bicycle Parking	\$ 130 per bicycle accommodated

**REGIONAL FUND EVALUATION CRITERIA**

TFCA projects will be evaluated on a first-come-first-serve basis. In order to address Air District priorities, funding available will be reserved as follows:

- a. **For Shuttle/Feeder Bus Services and Ridesharing Projects:** 60% of funding available in this category will be reserved for:
  - i. Projects in Highly Impacted Communities as defined in the Air District Community Air Risk Reduction plans.
  - ii. Priority Development Areas
  - iii. Projects that reduce green house gasses (GHG)
- b. **For Bicycle Facility Projects:** Funding will be available on a first-come-first-serve basis without funding reservations.

**Comments Received and Staff Responses to Proposed FY 2010/2011 TFCA Regional Fund Policies**

Commenter and Agency	Comment	Staff Response
Heath Maddox, San Francisco Municipal Transportation Agency (SFMTA)	<b>Policy #5 - Viable Project and Matching Funds:</b> The requirement for a local match for projects over \$150,000 is potentially problematic. Any requirement that grantees need to be able to point to specific charges to specific grants for the local match would be a significant burden.	The proposed Policies extend the existing requirement of matching funds for projects greater than \$150,000 to all projects in order to maximize funding distribution.
Tim Newman, Clean Energy	<b>Policy #7 - Maximum Grant Amount:</b> We recommend that the BAAQMD consider increasing the maximum grant award amount to \$1,500,000 for non-public entities if 100% of the proposed project activities are provided under contract to an eligible public entity and if such activities can be demonstrated to directly benefit the public entity.	Staff is not proposing to change the existing Policy at this time. The Policy allows public agencies to be awarded up to \$1,500,000 and non-public entities up to \$500,000 per year in order to maximize distribution of funds.
Heath Maddox, (SFMTA)	<b>Policy #8 - Readiness:</b> Also, the requirement that matching funds be identified before entering into the funding agreement, when combined with the requirement that project sponsors must sign a funding agreement within 60 days from the date it has been transmitted to them effectively requires project sponsors to obtain and book funds before we even find out whether or not our TFCA application has been successful.	Staff is not proposing to change the existing readiness policy given the requirement that funds be expended within two years, per Policy #20.
Heath Maddox, (SFMTA)	<b>Policy #18 - Combined Funds:</b> The restriction against combining TFCA County Program Manager Funds and TFCA Regional Funds needlessly restricts Project Sponsors' funding options. If cost-effectiveness thresholds are still met, it's not clear why combining regional and local funds would be objectionable.	Air District staff is proposing to maintain the current Policy which allows the combining of TFCA County Program Manager Funds and TFCA Regional Funds.
Lynne March, Sonoma County Transportation Authority (SCTA)	<b>Policy #18 - Combined Funds:</b> The draft Regional TFCA policies contradict the Program Manager policies in regards to a CMA's ability to fund efforts from both sources. SCTA objects to this change which reduces flexibility in allowing CMAs to craft projects to meet local needs.	During the next year, staff will work with County Program Managers to explore this issue further.

**Comments Received and Staff Responses to Proposed FY 2010/2011 TFCA Regional Fund Policies**

Committer and Agency	Comment	Staff Response
Daryl K. Halls, Solano Transportation Authority	<b>Policy #18 - Combined Funds:</b> STA does not support the proposed change to Policy #18. The proposed change would not allow Program Managers to fund eligible clean air projects through a combination of Program Manager Funds and TFCA Regional Funds. In addition, this policy appears to be in conflict to the recently approved TFCA Program Manager Fund Expenditure Guidance Document for FY 2010-11 and recent efforts to delegate more flexibility and responsibility to CMAs for the TFCA Program Management funds.	Air District staff is proposing to maintain the current Policy which allows the combining of TFCA County Program Manager Funds and TFCA Regional Funds.  During the next year, staff will work with County Program Managers to explore this issue further.
Paul Price, Napa County Transportation and Planning Agency	<b>Policy #18 - Combined Funds:</b> On page 16 of the Program Manager Guidance it states that, “TFCA County Manager Funds may be combined with TFCA Regional Funds for the funding of an eligible project with the exception of clean air vehicle projects” which is in contrast to page 3 of the TFCA Regional Fund Policies.	
Tim Newman, Clean Energy	<b>Policy #27 - Shuttle/Feeder Bus Service:</b> The provision to fund “...post-1989 diesel vehicle with a CARB Verified Diesel Emission Control Strategy...” and “...a post-1989 gasoline-fueled vehicle...” (refer to 27.c. and 27.d) seems to allow funding for older vehicles with emission factors that arguably provide less effective emission reductions as compared to new model vehicles.	These Policies only address the <i>operation</i> of shuttle services; recommendations for Policies regarding vehicle purchase projects will be proposed at a later date.
Heath Maddox, (SFMTA)	<b>Policy #29 - Bikeways – Paths Lanes &amp; Routes; and Policy #30 - Bicycle Parking:</b> Requiring that non-gap filling bicycle projects be located within one-half mile of at least three activity centers seems arbitrary. One-half mile is an appropriate distance for pedestrian improvements, but three miles is more appropriate for bicycle projects.	At this time, staff is not proposing to revise the existing Policy. However, during this next year staff will work with SFMTA to further evaluate this recommendation
Heath Maddox, (SFMTA)	<b>Policy #29 - Bikeways – Paths Lanes &amp; Routes:</b> Class II Bicycle Lanes (Continuous Construction), note that striping, etc. are also physical improvements.	Under the proposed Policies, Class II Continuous Construction Bicycle Lanes include striping as an eligible project component.

**Comments Received and Staff Responses to Proposed FY 2010/2011 TFCA Regional Fund Policies**

<b>Committer and Agency</b>	<b>Comment</b>	<b>Staff Response</b>
Heath Maddox, (SFMTA)	<b>Policy #29 - Bikeways – Paths Lanes &amp; Routes:</b> Class II Bicycle Lanes (Standard) and Class III Bicycle Routes should include signs as part of the project elements.	Under the proposed Policies, signs, as conform to Chapter 1000 of the California HWY Design Manuel, are included as eligible project components for Class II Bicycle Lanes and Class III Bicycle Routes.
Heath Maddox, (SFMTA)	<b>Policy #29 - Bikeways – Paths Lanes &amp; Routes:</b> Maximum grant amounts listed are based on bikeways going in two directions on a roadway. Note that paths are often not on a roadway.	The proposed FY 2010/2011 Policies have been revised to clarify this requirement.
Heath Maddox, (SFMTA)	<b>Policy #30 - Bicycle Parking:</b> Stationary bicycle parking projects must be located at a major activity center. This requirement would preclude the vast majority of potential rack locations in an urban area, which are generally decentralized along commercial corridors that may not qualify as a “major activity center”. We request that you remove racks from this requirement.	Under the proposed Policies, parking facilities are permitted to be located along urban and commercial corridors, which qualify as “major activity centers.”
Heath Maddox, (SFMTA)	<b>Policy #30 - Bicycle Parking:</b> Capacity should be clarified for lockers and also be addressed for vehicle racks.	Under proposed Policies, capacity is determined by how many bicycles the locker or rack can accommodate; capacity varies by locker or rack type.
Susan Heinrich (MTC)	<b>Policy #29 - Bikeways – Paths Lanes &amp; Routes:</b> We request that there be a requirement for all grant recipients to notify MTC when bicycle routes, paths and/or lanes have been built so that MTC can incorporate this information in our 511 BikeMapper network.	During the next year, staff will work with MTC to explore opportunities to coordinate transfer of requested information to MTC.
Susan Heinrich, Metropolitan Transportation Commission (MTC)	<b>Policy #29 - Bikeways – Paths Lanes &amp; Routes; and Policy #30 - Bicycle Parking:</b> We request that Bicycle Information Projects also be included as an eligible project. In order to further the benefits that bicycle facilities have in a region, cyclists need to know where bicycle facilities are located.	During the next year, staff will work with MTC to s eligibility requirements related to bicycle information projects for inclusion in future Policies.

## TFCA REGIONAL FUND POLICIES AND EVALUATION CRITERIA FOR FY ~~2009/2010~~2010/2011

The following policies apply to the Transportation Fund for Clean Air (TFCA) Regional Fund.

### BASIC ELIGIBILITY

- Eligible Projects:** Only projects that result in the reduction of motor vehicle emissions within the Air District's jurisdiction are eligible.

Projects must conform to the provisions of the California Health and Safety Code (HSC) sections 44220 et seq. and Air District Board of Directors adopted TFCA Regional Fund Policies and Evaluation Criteria for FY ~~2009/2010~~2010/11.

Projects must achieve surplus emission reductions, that is, beyond what is currently required through regulations, contracts, or other legally binding obligations at the time the Air District Board of Directors approves a funding allocation and at the time of the execution of a funding agreement.

- TFCA Cost-Effectiveness and Minimum Score:** ~~Unless otherwise noted below, P~~projects must meet a cost-effectiveness (C-E) of ~~\$90,000 per ton. levels and minimum scores established by the Air District's Board of Directors.~~ Cost-effectiveness is based on the ratio of TFCA funds awarded divided by the sum total tons of reactive organic gases (ROG), oxides of nitrogen (NO<sub>x</sub>), and weighted particulate matter 10 microns in diameter and smaller (PM<sub>10</sub>) reduced (\$/ton).

Certain project categories further specify the eligible funding amount per item (for example, \$/vehicle) which is based on the cost-effectiveness levels below.

~~Cost effectiveness levels are limited to the amounts set forth below.~~

<b>Project Type</b>	<b>Policy #</b>	<b>C-E Level Maximum (\$/weighted ton)</b>
<del>Alternative Fuel Light Duty Vehicles Reserved</del>	21	\$90,000
<del>Alternative Fuel Heavy Duty Service Vehicles (Low-mileage utility trucks in idling service) Reserved</del>	22	\$90,000
<del>Alternative Fuel Heavy Duty Vehicles Reserved</del>	23	\$90,000
<del>Alternative Fuel Bus Replacements Reserved</del>	24	\$90,000
<del>Alternative Fuel Infrastructure Reserved</del>	25	\$90,000
<del>Advanced Technology Demonstration Reserved</del>	26	\$500,000
Shuttle/Feeder Bus Service—Existing	27	\$90,000
Shuttle/Feeder Bus Service—Pilot	<u>27</u>	\$125,000
Regional Ridesharing	28	\$90,000
<u>Bicycle Facility- Bicycle Lanes and Paths</u>	<u>29</u>	<u>See policy 29 for award amounts</u>
<u>Bicycle Facility –Bicycle Lockers/Racks</u>	<u>30</u>	<u>See policy 30 for award amounts</u>

- ~~Minimum Score: In addition, applicants must earn at least 60 percent of available points based upon the project evaluation and scoring criteria listed in the Board approved Regional Fund Evaluation Criteria.~~

3. **Consistent with Existing Plans and Programs:** ~~With the exception of Clean Air Vehicle Projects and Advanced Technology Demonstration Projects, a~~All other project categories must comply with the transportation control measures and mobile source measures included in the Air District's most recently approved strategy(ies) for State and national ozone standards and, when applicable, with other adopted State, regional, and local plans and programs.
4. **Eligible Recipients and Authority to Apply:** Grant recipients must be responsible for the implementation of the project, have the authority and capability to complete the project, and be an applicant in good standing.
  - a. **Eligible Recipients:**
    - i. **Public agencies** are eligible to apply for all project categories.
    - ii. **Non-public entities** are only eligible to apply for new alternative-fuel (light, medium, and heavy-duty) vehicle projects, and advanced technology demonstrations, as described in HSC section 44241(b)7.
  - b. **Authority to Apply:** Applications must include either: 1) a signed letter of commitment from an individual with authority to enter into a funding agreement and carry out the project (e.g., Chief Executive or Financial Officer, Executive Director, City Manager, etc.), or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, Board of Directors, etc.) authorizing the submittal of the application and identifying the individual authorized to submit and carry out the project.
5. **Viable Project and Matching Funds:** Unless otherwise specified in the project category policies below, ~~applications of \$150,000 or less do not require matching funds. Applications requesting greater than \$150,000 must~~applications must provide matching funds from a non-Air District source, which equal or exceed at least 10% of the total project cost.

Applications must identify sufficient resources to complete the respective project. The project sponsor shall not enter into a TFCA Regional Fund funding agreement until all non-Air District funding has been approved and secured.
6. **Minimum Grant Amount:** \$10,000 per project.
7. **Maximum Grant Amount:** Maximum award per calendar year:
  - a. **Each public agency** may be awarded up to \$1,500,000, and
  - b. **Each non-public entity** may be awarded up to \$500,000.
8. **Readiness:** Projects must commence in calendar year ~~2010~~2011 or sooner. For purposes of this policy, "commence" means to receive delivery of vehicles, equipment, services, or to award a construction contract.
9. **Maximum Two Years Operating Costs:** Projects that provide a service, such as ridesharing programs and shuttle and feeder bus projects, are eligible to apply for a period of up to two (2) years.
10. **Project Revisions:** Project revisions initiated by the project sponsor which significantly change the project before the allocation of funds by the Air District Board of Directors may not be accepted. Following Air District Board of Directors allocation of funds for a project, an applicant may request revisions to that project that the applicant deems necessary or advisable, based on information the applicant received after the Board's allocation of funding. The Air District will consider only requests that are based on new information, are within the same eligible project category, and meet the same cost-effectiveness.

## APPLICANT IN GOOD STANDING

11. **In Compliance with Agreement Requirements:** Project sponsors who have failed to meet project implementation milestones or who have failed to fulfill monitoring and reporting requirements for any project funded by the Air District may not be considered eligible for new funding until such time as all of the unfulfilled obligations are met.
12. **Failed Audit:** Project sponsors who have failed either a fiscal audit or a performance audit for a prior Air District funded project will be excluded from future funding for five (5) years. Additionally, project sponsors with open projects will not be reimbursed for those projects until all audit recommendations and remedies have been satisfactorily implemented. A failed fiscal audit means an uncorrected audit finding that confirms an ineligible expenditure of funds. A failed performance audit means that a project was not implemented as set forth in the project funding agreement
13. **Signed Funding Agreement:** Only a fully executed funding agreement (i.e., signed by both the project sponsor and the Air District) constitutes the Air District's award of funds for a project. The Air District Board of Directors approval of an application does not constitute a final obligation on the part of the Air District to fund a project.

Project sponsors must sign a funding agreement within 60 days from the date it has been transmitted to them in order to remain eligible for award of TFCA funds. The Air District may authorize an extension of up to a total period of 120 days from the transmittal because of circumstances beyond project sponsor's reasonable control and at the Air District's discretion.

Project sponsors who failed to return a funding agreement from a previous funding cycle are not eligible to apply for a 12-month period.

14. **Insurance:** Each project sponsor must maintain general liability insurance and such additional insurance that is appropriate for specific projects, with coverage amounts specified in the respective funding agreements.

## INELIGIBLE PROJECTS

15. **Planning Activities:** Feasibility studies are not eligible for funding, nor are projects that only involve planning activities and that do not include an implementation phase. In addition, land-use projects (i.e., Smart Growth, Traffic Calming, and Arterial Management) that have not completed the Preliminary Design phase are not eligible.
16. **Cost of Developing Proposals and Grant Applications:** The costs to develop proposals or prepare applications are not eligible for TFCA funding.
17. **Duplication:** Projects that have previously received TFCA funds and therefore do not achieve additional emission reductions are not eligible.

Combining TFCA County Program Manager Funds with TFCA Regional Funds to achieve greater emission reductions for a single project is not considered project duplication.

## USE OF TFCA FUNDS

18. **Combined Funds:** TFCA County Program Manager Funds may be combined with TFCA Regional Funds for the funding of an eligible project. For the purpose of calculating the TFCA cost-effectiveness (Regional Fund Evaluation Criterion #1), the combined sum of TFCA County Program Manager Funds and TFCA Regional Funds shall be used to calculate the TFCA cost of the project.
19. **Administrative Costs:** Administrative costs (i.e., the costs associated with administering a TFCA grant) are limited to a maximum of five percent (5%) of total TFCA funds expended on a project. To be eligible

for reimbursement, administrative costs must be clearly identified in the application project budget and in the funding agreement between the Air District and the project sponsor.

20. **Expend Funds within Two Years:** Project sponsors must expend the awarded funds within two (2) years of the effective date of the funding agreement, unless a longer period is formally (i.e., in writing) approved in advance by the Air District in a funding agreement or as an amendment to the funding agreement.

### **ELIGIBLE PROJECT CATEGORIES:**

#### **CLEAN AIR VEHICLE PROJECTS**

21. ~~Alternative Fuel Light-Duty Vehicles~~ Reserved.
22. ~~Alternative Fuel Heavy-Duty Service Vehicles (Low-mileage utility trucks in idling service):~~ Reserved.
23. ~~Alternative Fuel Heavy-Duty Vehicles (high-mileage):~~ Reserved.
24. ~~Alternative Fuel Buses:~~ Reserved.
25. ~~Alternative Fuel Infrastructure:~~ Reserved.
26. ~~Advanced Technology Demonstration Projects:~~ Reserved.

#### **SHUTTLE/FEEDER BUS SERVICE PROJECTS**

27. **Shuttle/Feeder Bus Service:** Shuttle/feeder bus service projects are those requesting funds to operate a shuttle or feeder bus route to or from a rail station, airport, or ferry terminal. To be eligible, shuttle/feeder bus service schedules must be coordinated with connecting rail or ferry schedules.

Shuttle/feeder bus service applicants must either: a) be a public transit agency or, b) submit documentation from the General Manager of the transit agency that provides service in the area of the proposed shuttle route, which demonstrates that the proposed shuttle service does not duplicate or conflict with existing transit agency service.

All vehicles used in shuttle/feeder bus service must meet the applicable CARB standards for public transit fleets use one of the following types of shuttle/feeder bus vehicles:

- a. ~~A~~an alternative fuel vehicle (e.g. ~~CNG~~ compressed natural gas, liquefied natural gas, propane, electric);
- b. ~~a~~A hybrid-electric vehicle;
- c. ~~a~~A post-1997 diesel vehicle with a CARB Verified Diesel Emission Control Strategy (e.g., retrofit);  
or
- d. ~~a~~A post-1989 gasoline-fueled vehicle.

Pilot shuttle/feeder bus service projects are required to meet a cost-effectiveness of \$125,000/ton during the first two years of operation (see Policy #2). ~~A~~Pilot projects ~~ss~~ are defined as is a new defined routes that ~~are~~ is at least 70% unique and ~~have~~ has not been in operation in the past five years~~previously been funded through TFCA.~~

Pilot shuttle/feeder project Applicants must provide data supporting the demand for the service, letters of support from potential users and providers, and plans for financing the service in the future.

#### **RIDESHARING PROJECTS**

28. **Regional Ridesharing Projects:** For TFCA Regional Fund eligibility, ridesharing projects must be comprised of riders from at least three Bay Area counties. Applications for projects that provide a direct or indirect financial transit or rideshare subsidy exclusively to employees of the project sponsor are not eligible. Ride matching services must be coordinated with Metropolitan Transportation Commission's regional ridesharing program.

## **BICYCLE FACILITY PROJECTS**

### **29. Bikeways – Paths Lanes & Routes**

#### **Bikeway projects include new:**

- a. **Class I Bicycle Paths:** provide a separated right of way for the exclusive use of bicycles and pedestrians, in which motorized vehicles are prohibited and crossings by pedestrians and automobiles are minimized.
- b. **Class II Bicycle Lanes:** paved, on-road bikeways that separate bicyclists from vehicle traffic by a striped lane dedicated for one-way bicycle travel. Grant funding amounts for Continuous Construction and Standard Class-2 Bicycle Lanes may not be combined for the same segment.
  - i. **Class-2 Bicycle Lane (Continuous Construction)** – must entail physical improvements (e.g., non-maintenance paving or the widening of a roadway shoulder) continuously over the length of the segment.
  - ii. **Class-2 Bicycle Lane (Standard)** –includes project elements other than Continuous Construction, such as striping, marking and loop detectors.
- c. **Class III Bicycle Routs:** indicate a preferred route for bicycle travel that is shared with motor vehicles. They follow roadways where traffic is relatively light and potential conflicts between bicycles and vehicles can be minimized. Street markings, traffic calming devices and barriers are eligible elements of a Class III project.

#### **Project-specific requirements:**

Projects must be included in an adopted countywide bicycle plan, Congestion Management Program (CMP), or the Metropolitan Transportation Commission's Regional Bicycle Plan.

Projects must, where applicable, be consistent with design standards published in Chapter 1000 of the California Highway Design Manual.

Bikeway projects must:

- a. Reduce vehicle trips made for utilitarian purposes (e.g., work or school commuting), and
- b. Be one of the following:
  - i. Within one-half mile of at least three major activity centers (e.g., transit stations, office complexes, schools), or
  - ii. Provide a gap closure (e.g., a bridge over a roadway) in, or an extension to, an existing bicycle network that already services three major activity centers. The new segment must be within three contiguous bikeway miles of the requisite activity centers. Gap closure projects may apply for TFCA funding under the Smart Growth project type as well.

Pre and post-project bicycle counts must be conducted and reported for bikeways projects that are awarded more than \$100,000, in TFCA funds.

TFCA funding is limited to a maximum award amount of \$120,000 per project. Maximum funding amounts listed below are based on bikeways going in two directions; a bikeway going in a single direction would qualify for only one-half the stated amount\*.

**Maximum funding amounts per project type:**

<b>Project Type</b>	<b>Maximum \$ per Two-Way Segment*</b>
Class-1 Bicycle Path	\$115,000 per mile of path
Class-2 Bicycle Lane – Continuous Construction	\$ 85,000 per mile of roadway
Class-2 Bicycle Lane – Standard	\$ 30,000 per mile of roadway
Class-3 Bicycle Route	\$ 15,000 per mile of route

**30. Bicycle Parking**

**Bicycle Parking projects include new:**

- a. Bicycle racks (including those on streets, sidewalks, vehicles and vessels);
- b. Electronic and mechanical (including retrofit from mechanical to electronic) bicycle lockers; and
- c. Secure bicycle parking (including bicycle cages and parking stations).

**Project-specific requirements:**

Projects must be included in an adopted countywide bicycle plan, Congestion Management Program (CMP), or the Metropolitan Transportation Commission’s Regional Bicycle Plan.

Specific locations for racks and lockers must be identified in applications for funding.

Stationary bicycle parking projects (including racks, lockers, cages, and parking stations) must be located at a major activity center (e.g., transit station, shopping center, office building, or school).

User data must be collected and reported for electronic bicycle locker projects that are awarded more than \$25,000, in TFCA funds.

TFCA funding is limited to a maximum award amount of \$120,000 per project.

**Maximum funding amounts per project type:**

<b>Project Type</b>	<b>Maximum \$ per Unit</b>
Bicycle Locker(s) – Electronic	\$ 2,500 per locker
Bicycle Locker(s) – Retrofit mechanical to electronic	\$ 650 per retrofit kit
Bicycle Locker(s) – Mechanical	\$ 900 per locker
Bicycle Rack(s)	\$ 60 per bicycle accommodated
Bicycle Rack(s) on Vehicles	\$ 750 per rack
Secure Bicycle Parking	\$ 130 per bicycle accommodated

**REGIONAL FUND EVALUATION CRITERIA**

Grant applications must comply with the TFCA Regional Fund Policies, and also are evaluated based on six criteria:

Both public agencies and non-public entities are eligible to receive points under Criteria 1, 2, 3, 5, and 6. Only public agencies are eligible to receive points under Criterion 4. Clean air vehicle projects covered by Policies 21–24 are not eligible for points under Criterion 6. An applicant must achieve a minimum percentage of 60% of available points to be eligible for consideration for funding. Projects will be ranked by calculating the percentage of total eligible points scored in descending order. In the event that two or more projects achieve an equal score, the project with the best TFCA cost-effectiveness will receive a higher ranking.

Available TFCA Regional Funds will be allocated to projects beginning with the highest ranking project and proceeding in sequence to lower ranking projects. If the TFCA Regional Fund is oversubscribed, the point where

the next ranked eligible project cannot be fully funded defines the cut-off point for the funding cycle, i.e., all projects above this point will be funded. If the Regional Fund is undersubscribed, any remaining funds are generally allocated to projects in the subsequent funding cycle. By mutual consent of the project sponsor and the Air District, grant awards may be reduced from the amount requested in the original application.

**FY 2010/2011 TFCA Regional Fund Scoring Criteria** [DJ1]

Criteria	Maximum Points
1. TFCA Funding Effectiveness	60
2. Greenhouse Gas Emission Reductions	10
3. Other Project Attributes	5
4. Clean Air Policies and Programs*	10
5. Sensitive and PM Impacted Communities	---
— A. General	10
— B. Highly Impacted Communities	High priority**
6. Priority Development Areas***	5
<b>Total</b>	<b>100</b>

\* Only public agencies eligible to receive points. \*\* High priority is defined per Criterion 5 below.

\*\*\* Not available to vehicle projects covered by Policies 21—24.

**DISCUSSION**

**Criterion 1: TFCA Funding Effectiveness (maximum 60 points)**

Measures the cost-effectiveness (C-E) of a project in reducing air pollutant emissions. Generally, applications that include higher rates of matching funds will score better than those that request higher percentage of TFCA funding. TFCA funds budgeted for the project (TFCA Regional Funds and TFCA County Program Manager Funds combined) will be divided by the estimated lifetime emission reductions for the project. The estimated lifetime emission reductions are the sum of reactive organic gases, oxides of nitrogen, and weighted particulate matter (PM)<sup>1</sup> that will be reduced over the life of the project. Air District staff will determine the estimated emission reductions and TFCA funding effectiveness for the project.

The point scales for awarding points for this criterion are presented below:

**a. For projects that must achieve a C-E threshold of \$90,000/ton:**

TFCA \$/Ton	Points	TFCA \$/Ton	Points
\$0 — \$19,999	60	\$56,000 — \$57,999	53
\$20,000 — \$21,999	60	\$58,000 — \$59,999	52.5
\$22,000 — \$23,999	60	\$60,000 — \$61,999	52
\$24,000 — \$25,999	59.75	\$62,000 — \$63,999	51.5
\$26,000 — \$27,999	59.5	\$64,000 — \$65,999	51
\$28,000 — \$29,999	59.25	\$66,000 — \$67,999	50.5
\$30,000 — \$31,999	59	\$68,000 — \$69,999	50
\$32,000 — \$33,999	58.75	\$70,000 — \$71,999	49.5
\$34,000 — \$35,999	58.5	\$72,000 — \$73,999	49

<sup>1</sup> PM emissions include tailpipe PM, as well as brake particles, tire particles and re-entrained road dust. Consistent with California Air Resources Board methodology to calculate PM emission reductions for the Carl Moyer Program, weighted PM emissions will be calculated by adding the tailpipe PM multiplied by a factor of 20, plus the sum of tire, brake, and road dust PM.

\$36,000	\$37,999	58	\$74,000	\$75,999	48.5
\$38,000	\$39,999	57.5	\$76,000	\$77,999	48
\$40,000	\$41,999	57	\$78,000	\$79,999	47.5
\$42,000	\$43,999	56.5	\$80,000	\$81,999	47
\$44,000	\$45,999	56	\$82,000	\$83,999	46.5
\$46,000	\$47,999	55.5	\$84,000	\$85,999	46
\$48,000	\$49,999	55	\$86,000	\$87,999	45.5
\$50,000	\$51,999	54.5	\$88,000	\$89,999	45
\$52,000	\$53,999	54	\$90,000	and above	0
\$54,000	\$55,999	53.5			

**b. For projects that must achieve a C-E threshold of \$125,000/ton (Pilot Shuttles):**

TFCA \$/Ton			TFCA \$/Ton		
		Points			Points
\$0	\$19,999	60	\$74,000	\$76,999	53
\$20,000	\$22,999	60	\$77,000	\$79,999	52.5
\$23,000	\$25,999	60	\$80,000	\$82,999	52
\$26,000	\$28,999	59.75	\$83,000	\$85,999	51.5
\$29,000	\$31,999	59.5	\$86,000	\$88,999	51
\$32,000	\$34,999	59.25	\$89,000	\$91,999	50.5
\$35,000	\$37,999	59	\$92,000	\$94,999	50
\$38,000	\$40,999	58.75	\$95,000	\$97,999	49.5
\$41,000	\$43,999	58.5	\$98,000	\$100,999	49
\$44,000	\$46,999	58	\$101,000	\$103,999	48.5
\$47,000	\$49,999	57.5	\$104,000	\$106,999	48
\$50,000	\$52,999	57	\$107,000	\$109,999	47.5
\$53,000	\$55,999	56.5	\$110,000	\$112,999	47
\$56,000	\$58,999	56	\$113,000	\$115,999	46.5
\$59,000	\$61,999	55.5	\$116,000	\$118,999	46
\$62,000	\$64,999	55	\$119,000	\$121,999	45.5
\$65,000	\$67,999	54.5	\$122,000	\$124,999	45
\$68,000	\$70,999	54	\$125,000	and above	0
\$71,000	\$73,999	53.5			

**e. For projects that must achieve a C-E threshold of \$500,000/ton (Advanced Technology Demonstration):**

**Criterion 2: Greenhouse Gas Emission Reductions (maximum 10 points)**

Rewards projects that reduce greenhouse gas emissions. Awards a maximum of 10 points (on a sliding scale, 0 to 10 points) for projects that reduce emissions of greenhouse gases, predominately carbon dioxide. Generally, projects that promote alternative modes of transportation and reduce single occupant vehicle trips (e.g., transit, ridesharing, bicycling and walking), as well as projects that improve motor vehicle fuel economy, will reduce greenhouse gas emissions. TFCA funds budgeted for the project will be divided by the estimated lifetime emission reductions of greenhouse gases for the project. Air District staff will determine the estimated emission reductions, TFCA funding effectiveness for greenhouse gases, and the scale for awarding points.

**Criterion 3: Other Project Attributes (maximum 5 points)**

Provides a mechanism in the evaluation and scoring process to identify and assess desirable project attributes that are not captured in the analysis of TFCA funding effectiveness. Projects may score points under this criterion based upon other project attributes identified for each project type. The specific project attributes for each project type will be identified after grant applications have been received and reviewed. Examples of Other Project Attributes will be provided in TFCA Guidance document.

**Criterion 4: Clean Air Policies and Programs (maximum 10 points)**

Recognizes and encourages the efforts of public agencies to implement policies and programs that promote the region's air quality objectives, especially land use and transportation policies that help to reduce air pollution from motor vehicles.

To receive points for this criterion, the sponsoring agency must describe its policies and actions to implement the transportation control measures (TCMs) in the most recently adopted strategy(ies) for State and national ozone standards throughout the agency's jurisdiction. Points will be awarded based upon the performance of the project sponsor in implementing those elements of each TCM which are within the purview of the sponsor agency.

Non public entities are not eligible for points under this criterion.

**Criterion 5: Sensitive and Particulate Matter (PM) Impacted Communities (maximum 10 points)**

Under Criterion 5, grant applications are eligible for credit under two sub-criteria.

a. **General:** This sub-criterion will award a maximum of 10 points (on a sliding scale, 0-10 points) for projects that directly reduce emissions in communities with both high PM<sub>2.5</sub> emissions and sensitive populations (i.e., children, seniors, those with low incomes or elevated asthma rates).

b. **Highly Impacted Communities:** Additional credit will be given to projects in these communities by providing them with the maximum score of 10 points in this Criterion and an additional 5 points under Criterion 3 "Other Project Attributes" provided that they meet a minimum percentage of operations in highly impacted communities. These communities have been identified by the Air District as having the most severe health risk and relatively low income levels.

Both sub-criteria 5A and 5B are based on data from the Air District's Community Air Risk Evaluation (CARE) Program; maps that identify these communities will be made available on the Air District's website. To qualify for points, a project must directly benefit one or more of these communities. The credit awarded will be determined by Air District staff, and will be based upon the percentage of project resources or services that would directly benefit the community, and the extent to which the project sponsor demonstrates this benefit.

**Criterion 6: Priority Development Areas (maximum 5 points)**

~~Awards additional points to projects located in concentrated areas identified for future growth near transit and in existing Bay Area communities. Funding projects operating in regionally approved Priority Development Areas (PDAs) will lead to reduced emissions in the region generally, and in PDAs in particular. Both public agencies and non-public entities are eligible for points under this criterion.~~

~~As with Criterion 5, to receive points for this criterion, the project must directly benefit one or more approved PDAs. The credit awarded will be determined by Air District staff, and will be based upon the percentage of project resources or services that would directly benefit the PDA, and the extent to which the project sponsor demonstrates this benefit.~~

~~Clean air vehicle projects covered by Polices 21—24 are not eligible for points under this criterion.~~

TFCA projects will be evaluated on a first-come-first-serve basis. In order to address Air District priorities, funding available will be reserved as follows:

- a. **For Shuttle/Feeder Bus Services and Ridesharing Projects:** 60% of funding available in this category will be reserved for:
  - i. Projects in Highly Impacted Communities as defined in the Air District Community Air Risk Reduction plans.
  - ii. Priority Development Areas
  - iii. Projects that reduce green house gasses (GHG)
- b. **For Bicycle Facility Projects:** Funding will be available on a first-come-first-serve basis without funding reservations.

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: May 20, 2010

Re: Update on Air District Truck Programs

---

RECOMMENDED ACTION

Informational item, receive and file.

BACKGROUND

Air District grant programs have historically provided numerous funding opportunities to reduce emissions from heavy-duty trucks (trucks weighing more than 33,000 pounds). Emissions from these vehicles are responsible for up to 85% of the total cancer health risk in the Bay Area air basin and are the major driver of health impacts in communities along Bay Area highways. With over 30,000 eligible trucks registered within Air District jurisdiction, staff anticipates a large demand for retrofits and replacement funding prior to upcoming California Air Resources Board (ARB) regulatory compliance deadlines. As part of this report, Staff will update the committee on Air District incentives program activities to address truck emissions.

DISCUSSION

The Air District currently offers funding opportunities for heavy duty truck projects through its Goods Movement Program (I-Bond), Transportation Fund for Clean Air (TFCA) program, and the Carl Moyer Program. Due to stringent guideline requirements, each of these programs targets a specific subset of heavy-duty trucks and funding for these programs comes from various state and local sources.

**I-Bond Program**

The I-Bond program provides funding for the replacement and retrofit of on-road trucks operating in goods movement activities in the Bay Area trade corridor. Eligible trucks can be either port or non-port trucks.

***Current Program***

To date 1,100 port trucks (894 retrofits and 206 replacements) have been upgraded under the Port Truck Emissions Reduction program. These upgrades are the result of two Air District initiatives. An original program that was funded with \$22 million by the Air District (using I-Bond and TFCA monies), the Port of Oakland, and United States Environment Protection Agency (USEPA) that targeted retrofit and replacement of approximately 1,000 port trucks by January 1, 2010.

Additionally, a supplemental program of approximately \$4.5 million in state funds was targeted to provide upgrades to another 648 port trucks by April 30, 2010. Initially 868 truckers expressed interest in receiving grant funds from the supplemental program. However, only 648 of those individuals could provide sufficient proof that they could finance either the additional cost of the retrofit device to be installed or replacement truck. Therefore 220 truckers were not able to participate in the program due to their inability to provide proof of adequate financing.

Of the 648 truckers that executed grant contracts with the Air District, none have been refused funding. However, an ARB imposed compliance deadline on April 30, 2010, related to Port access means that approximately 200 drivers who have not yet installed their retrofit devices or received their replacement trucks can not enter the Port until they upgrade their equipment (install a retrofit device or get a replacement truck). This compliance deadline does not affect their ability to get grant funds, as the Air District will pay for devices installed on trucks up until June 30, 2010. Staff expects at least 100 of these installations to be complete by the end of May.

There are also approximately 290 trucks that have received an extension from ARB to enter the Port of Oakland until June 30, 2010. These drivers will also need to install retrofits or have replacement trucks by that date or they will lose access to the Port. Staff continues to work with grantees and vendors to ensure their equipment is upgraded as quickly as possible before this deadline.

### ***Future Program***

Staff expects to allocate \$15 million in I-Bond funding to approximately 300 additional non-port truck replacement projects this year. Based on grant deadlines, staff will begin application review and pre-inspections for non-port trucks in late June/early July 2010 with a goal of executing contracts with grantees by late September 2010. On May 11, 2010, the Air District applied for an additional \$45 million in state I-Bond funding for future on-road truck projects as part of the Year 2 and 3, I-Bond solicitation.

### **Transportation Fund for Clean Air Program**

The TFCA program provides funding for the purchase of hybrid-electric, electric, fuel cell and Compressed Natural Gas (CNG)/ Liquefied Natural Gas (LNG) vehicles. The Air District issued a solicitation for these vehicles in October 2009. That solicitation was for \$5 million, and staff is still currently accepting and evaluating project applications for vehicles and infrastructure (approximately \$1.8 million is still available for projects).

### **Carl Moyer Program**

The Carl Moyer Program provides funding for on-road truck replacement, and retrofit projects through its Voucher Incentive Program (VIP). Under ARB requirements, VIP funds are specifically targeted at fleets of three or fewer trucks, and are not available for port trucks. The VIP was first implemented by the Air District in July 2009 and to date has allocated \$235,000 to replace seven vehicles in the Bay Area. The Air District has contracted with 13 Bay Area truck dealerships to implement the VIP, and assist with outreach efforts.

In March 2010, the ARB approved revisions to the VIP guidelines that will expand the program to more of the trucking community. The Air District currently has approximately \$3.5 million available to replace heavy-duty trucks, from a combination of state and local funds (CMP and Mobile Source Incentive Funds), available for VIP truck replacement and retrofit projects. These funds will replace approximately 80 vehicles.

### **Outreach**

Staff will utilize a number of outreach methods to inform the trucking community of the availability of funds, including: building relationships with local truck vendors to assist in the outreach efforts, speaking engagements at truck group meetings, website postings, and staffing a remote location on a key Bay Area truck route with the goal to providing information and application materials to interested truckers. Staff has also built a robust mailing list of trucks operating in the Bay Area from the interest it received from the first Year of the I-Bond program. Staff is also considering billboard advertising, posting program information on trade websites, blogs and trucker Wi-Fi points, and a direct mail campaign to promote the programs.

### **BUDGET CONSIDERATION / FINANCIAL IMPACT**

None.

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 Haggerty and  
Members of the Mobile Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 20, 2010

Re: Consideration of proposed Board Resolution in support of an application  
for California Goods Movement Bond Funding

---

RECOMMENDED ACTION

Recommend the Board of Directors:

- Adopt a Resolution in support of the Air District's application for Goods Movement Bond funding.

BACKGROUND

In November 2006, California voters authorized the Legislature to appropriate \$1 billion in bond funding to quickly reduce air pollution emissions and health risk from freight movement along California's priority trade corridors. On February 28, 2008, The California Air Resources Board (ARB) approved an allocation of \$140 million from projected bond sales to the Bay Area trade corridor (approximately \$35 million per year over the next four years.)

To date the Air District has encumbered \$35 million in Year 1 Goods Movement Bond (I-Bond) funding. These monies have and continue to be focused on retrofitting and replacing on-road and Port of Oakland (Port) trucks. The program will also fund a shore power project to electrify three berths at the APL terminal at the Port as part of the Year 1 funding cycle. As part of this report, Staff will update the Committee on its recent I-Bond Year 2 and 3 application and request Board of Directors adoption of a resolution in support of this application.

DISCUSSION

On April 15, 2010, the ARB issued a Notice of Funding Availability for I-Bond Years 2 and 3 (combined) funding. Staff held a public meeting on May 6, 2010 to gather input on its ideas for funding objectives for the Bay Area trade corridor for Year 2 and 3 of the I-Bond program. Staff also met with staff from the Port of Oakland to coordinate efforts, and discuss each agency's interests in applying for I-Bond funds. The input from the public meeting and the meetings with the Port were taken into consideration as Air District staff finalized the application.

Staff believes future I-Bond funding must be used to address a number of important upcoming regulatory deadlines for the following source categories:

- **On-road trucks:** Emissions from these vehicles are responsible for up to 85% of the total cancer health risk in the Bay Area air basin and are the major driver of health impacts in communities along Bay Area highways. With over 30,000 eligible trucks registered within Air District jurisdiction, there will be a large demand for retrofits and replacement funding prior to upcoming regulatory compliance dates in 2013 and 2014.
- **Shore-power:** Emissions from ocean-going vessels at berth at the Port of Oakland represent a significant health impact for residents of the West Oakland community (second only to drayage trucks). Projects to reduce emissions from these vessels require long lead times to ensure their successful completion. With an impending regulatory compliance date in 2014, reducing some of the 61 tons of diesel particulate matter emitted annually from this source is a priority.
- **Locomotives:** Emissions from locomotives are another key driver of risk in certain Bay Area highly impacted communities, specifically in West Oakland and Richmond. Additionally, this category of project cannot be regulated by local or state jurisdictions, therefore providing incentives for emissions reductions in this category remains a priority for the I-Bond program.

Based on the Air District's projected expenditure of \$35 million in Program Year 1, there is \$105 million remaining from the \$140 million allotment to the Bay Area trade corridor. The Air District's application for Program Year 2 and 3 funding requested: \$45 million for heavy-duty trucks, \$39.14 million for shore power projects, and \$3.86 million for locomotive projects. This request envisions a Year 4 application for \$18 million to replace approximately 500 drayage trucks at the Port in order to address their 2014 regulatory compliance date. The Air District's application was submitted to ARB on May 11, 2010. ARB expects to take I-Bond award recommendations to their Board, at their June 24-25, 2010 Board Hearing.

One required element of the Air District's I-Bond application to ARB is the submittal of an Air District Board resolution. Staff requests that the Committee recommend the Board of Directors adopt a resolution in support of the Air District's application for Goods Movement Bond funding.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Anthony Fournier  
Reviewed by: Damian Breen

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

**RESOLUTION No. 2010 -**

**A Resolution of the Board of Directors of the Bay Area Air Quality Management  
Accepting Goods Movement Emission Reduction Program Funds  
From the California Air Resources Board**

WHEREAS, under Government Code, Section 8879.23, subdivision (c), paragraph (2), funds are appropriated to the California Air Resources Board (ARB) for allocation on a competitive basis for projects that are shown to achieve the greatest emission reductions from activities related to the movement of freight along California's trade corridors;

WHEREAS, California Health and Safety Code, Section 39625 et seq. empowers ARB to allocate Goods Movement Emission Reduction Program ("Program") funds to local public entities, such as the Bay Area Air Quality Management District (District), to provide financial incentives to reduce emissions associated with the movement of freight along California's trade corridors;

WHEREAS, in May 2008, ARB awarded the first installment of \$250 million to local agencies, which are currently implementing emission reduction projects under the Program;

WHEREAS, under the State's current fiscal policies, ARB's ability to award the subsequent \$500 million in Program funding is dependent on the availability of cash from bond sales or other State financing mechanisms;

WHEREAS, from Spring 2010 bond sales, ARB has the cash available to award approximately \$200 million for new projects to local and state agencies at a public ARB Board hearing on June 24-25, 2010;

WHEREAS, in April 2010, ARB issued a notice of funding availability inviting local and state agencies to submit applications for funding for new projects;

WHEREAS, the District wishes to apply for funds for new projects pursuant to the ARB invitation;

WHEREAS, ARB requires each public agency to include in its application a signed or proposed resolution authorizing receipt of Program funding;

NOW, THEREFORE, BE IT RESOLVED, the Board of Directors hereby authorizes the District to enter into an agreement with ARB, accept funds, and provide matching funds under the fiduciary control of the District that are identified in a District project funding demonstration.

BE IT FURTHER RESOLVED, the Executive Officer is the District representative authorized to sign and submit the local agency project application.

BE IT FURTHER RESOLVED, the Executive Officer is the District representative authorized to execute the District's project grant agreement between ARB and the District.

BE IT FURTHER RESOLVED, the Executive Officer is the District representative authorized to execute an equipment project contract between the District and equipment owner.

BE IT FURTHER RESOLVED, the Executive Officer is the District representative authorized to sign Grant Expenditure Requests and delegate signature authorization to others. 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 \_\_\_\_\_, 2010 by the following vote of the Board:

AYES:

NOES:

ABSENT:

---

Brad Wagenknecht  
Chairperson of the Board of Directors

ATTEST:

---

John Gioia  
Secretary of the Board of Directors

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Wagenknecht and Members  
of the Board of Directors

From: Jack P. Broadbent  
Executive Officer/APCO

Date: May 25, 2010

Re: Proposed Air District CEQA Guidelines and Air Quality Thresholds of  
Significance

---

RECOMMENDED ACTION

Approve the proposed CEQA air quality thresholds of significance as described in the *Proposed Thresholds of Significance* (May 3, 2010) report (Attachment 1) and in the summary table of the proposed thresholds of significance in Attachment 2.

BACKGROUND

The District's CEQA Guidelines provide guidance to local lead agencies conducting air quality analyses pursuant to the California Environmental Quality Act (CEQA). In the ten years since the District last reviewed its recommended CEQA thresholds of significance for air quality, there have been many changes that affect the management of air resources in the Bay Area. The District CEQA Guidelines are being updated to address: 1) more stringent health based ambient air quality standards for ozone and fine particulate matter; 2) greater understanding and concern about public health impacts from localized high exposures to air toxics and fine particulate matter; and 3) current uncertainty about to how address greenhouse gases in CEQA documents.

For these reasons, and to further the goals of other District programs such as encouraging transit-oriented and infill development, staff undertook a comprehensive review of all recommended CEQA thresholds, revising them as appropriate, and developing new thresholds where appropriate. The proposed revisions to the thresholds of significance include thresholds for construction, project operation, and plan-level emissions of criteria air pollutants, greenhouse gases, toxic air contaminants, and odors. Staff also updated elements of the Guidelines that provide technical information on impact assessment methodology and mitigation strategies.

## DISCUSSION

Staff has conducted extensive public outreach on the CEQA Guidelines update. Staff hosted public workshops for the Guidelines update in February, April, September, and December 2009. Public hearings on the proposed significance thresholds were held by the Board of Directors on November 18 and December 2, 2009, and the Board further discussed the matter at the January 6, and May 5, 2010 meetings.

At the January 6 meeting, the Board of Directors directed staff to conduct additional outreach to local agency staff in each of the nine Bay Area counties to improve understanding of the proposed Guidelines update and to address issues local staff may have. Staff has since met extensively with city, county and regional agency staff, local officials, business and environmental groups, and other interested stakeholders. In April 2010, staff held local agency staff workshops in each county and additional public workshops.

Staff also developed a wide variety of technical support tools to assist local staff in understanding and implementing the Guidelines. These technical tools will greatly streamline air quality analyses in the CEQA process. Staff hosted training sessions in May on the computer models and other analytical tools that have been developed to implement the Guidelines.

Staff also conducted numerous case studies of development projects throughout the Bay Area. These case studies allowed staff to beta test the technical tools and thresholds of significance and also helped demonstrate the revised Guidelines to the public.

Based on input received during public outreach, evaluation of the case studies, consideration of the technical support tools, and ongoing analysis, staff believes the proposed thresholds are appropriate for the Bay Area. They are technically sound, and support infill development critical for air quality improvement while being health protective.

The proposed thresholds of significance are described in the report *Proposed Thresholds of Significance* (May 3, 2010) included as Attachment 1 and are summarized in a table included as Attachment 2. At the December 2, 2009 hearing the Board of Directors directed staff to provide an option - referred to as the "tiered approach" - that included more stringent risk and hazards thresholds for receptors in impacted communities as identified through the CARE program. A summary table including this tiered approach option will be provided at the June 2, 2010 hearing. In addition, at previous meetings of the Board of Directors there has been discussion of the appropriate effective date for the risk and hazards thresholds for new receptors pending preparation of community risk reduction plans. The Board may discuss an option of a future effective date for risk and hazards thresholds for new receptors.

The proposed final Thresholds of Significance Report, CEQA Guidelines, and all technical tools were posted for public review on May 3, 2010. Attachment 3 includes written comments received since January 6, 2010 and staff responses.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding for consultant services to assist with the CEQA Guidelines update is included in the approved FY 2009/2010 Air District budget.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Greg Tholen  
Reviewed by: Henry Hilken

Attachment 1: *Proposed Thresholds of Significance* (May 3, 2010)  
Attachment 2: Summary table of the proposed thresholds of significance  
Attachment 3: Written comments received after January 6, 2010 and staff responses



**California Environmental Quality Act  
Guidelines Update**

**Proposed Thresholds of Significance**

**May 3, 2010**



# Table of Contents

Section	Page
<b>1 Introduction.....</b>	<b>1</b>
1.1 BAAQMD/CEQA Regulatory Authority .....	1
1.2 Justification for Updating CEQA Thresholds.....	3
<b>2 Greenhouse Gas Thresholds .....</b>	<b>7</b>
2.2 Proposed Thresholds of Significance.....	8
2.3 Justification and Substantial Evidence Supporting Thresholds .....	8
2.3.1 Scientific and Regulatory Justification .....	9
2.3.2 Project-Level GHG Thresholds .....	11
2.3.3 Plan-Level GHG Thresholds.....	22
2.3.4 Greenhouse Gas Reduction Strategies .....	25
2.3.5 Stationary Source GHG Threshold .....	27
2.3.6 Summary of Justification for GHG Thresholds .....	28
<b>3 Community Risk and Hazard Thresholds.....</b>	<b>31</b>
3.2 Proposed Thresholds of Significance.....	33
3.3 Justification and Substantial Evidence Supporting Thresholds .....	35
3.3.1 Scientific and Regulatory Justification .....	36
3.3.2 Construction, Land Use and Stationary Source Risk and Hazard Thresholds.....	42
3.3.3 Cumulative Risk and Hazard Thresholds .....	46
3.3.4 Plan-Level Risk and Hazard Thresholds.....	48
3.3.5 Community Risk Reduction Plans .....	48
<b>4 Criteria Pollutant Thresholds.....</b>	<b>50</b>
4.2 Proposed Thresholds of Significance.....	50
4.3 Justification and Substantial Evidence Supporting Thresholds .....	50
4.3.1 Project Construction Criteria Pollutant Thresholds .....	50
4.3.2 Project Operation Criteria Pollutant Thresholds.....	51
4.3.3 Local Carbon Monoxide Thresholds .....	52
4.3.4 Plan-Level Criteria Pollutant Thresholds.....	52
4.3.5 Criteria Pollutant Thresholds for Regional Plans .....	53
<b>5 Odor Thresholds .....</b>	<b>54</b>
5.2 Proposed Thresholds of Significance.....	54
5.3 Justification and Substantial Evidence Supporting Thresholds .....	54
<b>References.....</b>	<b>56</b>

## List of Tables

Table 1 – Proposed Air Quality CEQA Thresholds of Significance .....	4
Table 2 – California 1990, 2002-2004, and 2020 Land Use Sector GHG <sup>1</sup> .....	16
Table 3 – 2020 Land Use Sector GHG Emission Reductions from State Regulations and AB 32 Measures .....	17
Table 4 – SFBAAB 1990, 2007, and 2020 Land Use Sector GHG Emissions Inventories and Projections (MMT CO <sub>2</sub> e/yr).....	18
Table 5 – Operational GHG Threshold Sensitivity Analysis .....	21
Table 6 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - Land Use Inventory Sectors .....	22
Table 7 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - All Inventory Sectors .....	24
Table 8 – Statistical Summary of Estimated Population-Weighted Ambient Cancer Risk in 2005 .....	32
Table 9 – Screening Distances for Potential Odor Sources.....	55

## Bay Area Air Quality Management District

# Proposed Air Quality CEQA Thresholds of Significance

## 1 INTRODUCTION

Bay Area Air Quality Management District (BAAQMD or Air District) staff analyzed various options for California Environmental Quality Act (CEQA) air quality thresholds of significance for use within BAAQMD's jurisdiction. The analysis and evaluation undertaken by Air District staff is documented in the *Revised Draft Options and Justification Report – California Environmental Quality Act Thresholds of Significance* (Draft Options Report) (BAAQMD October 2009).

Air District staff hosted public workshops in February, April, September and October 2009, and April 2010 at several locations around the Bay Area. Air District staff also hosted additional workshops in each of the nine Bay Area counties specifically designed for, and to solicit input from, local agency staff. In addition, Air District staff met with regional stakeholder groups to discuss and receive input on the threshold options being evaluated. Throughout the course of the public workshops and stakeholder meetings Air District staff received many comments on the various options under consideration. Based on comments received and additional staff analysis, the threshold options and staff-recommended thresholds were further refined. The culmination of this nearly year and a half-long effort was presented in the Proposed Thresholds of Significance Report published on November 2, 2009 as the Air District staff's proposed air quality thresholds of significance.

The Air District Board of Directors (Board) held public hearings on November 18 and December 2, 2009 and January 6, 2010, to receive comments on staff's Proposed Thresholds of Significance (November 2, 2009; revised December 7, 2009). After public testimony and Board deliberations, the Board requested staff to present additional options for risk and hazard thresholds for Board consideration. This Report includes risks and hazards threshold options, as requested by the Board, in addition to staff's previously recommended thresholds of significance. The proposed thresholds presented herein, upon adoption by the Air District Board of Directors, are intended to replace all of the Air District's currently recommended thresholds. The proposed air quality thresholds of significance, and Board-requested risk and hazard threshold options, are provided in Table 1 at the end of this introduction.

### 1.1 BAAQMD/CEQA REGULATORY AUTHORITY

The BAAQMD has direct and indirect regulatory authority over sources of air pollution in the San Francisco Bay Area Air Basin (SFBAAB). CEQA requires that public agencies consider the potential adverse environmental impacts of any project that a public agency proposes to carry out, fund or approve. CEQA requires that a lead agency prepare an Environmental Impact Report (EIR) whenever it can be fairly argued (the "fair argument"

standard), based on substantial evidence,<sup>1</sup> that a project may have a significant effect<sup>2</sup> on the environment, even if there is substantial evidence to the contrary (CEQA Guidelines §15064). CEQA requires that the lead agency review not only a project's direct effects on the environment, but also the cumulative impacts of a project and other projects causing related impacts. When the incremental effect of a project is cumulatively considerable, the lead agency must discuss the cumulative impacts in an EIR. (CEQA Guidelines §15064).

The "fair argument" standard refers to whether a fair argument can be made that a project may have a significant effect on the environment (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84). The fair argument standard is generally considered a low threshold requirement for preparation of an EIR. The legal standards reflect a preference for requiring preparation of an EIR and for "resolving doubts in favor of environmental review." *Meija v. City of Los Angeles* (2005) 130 Cal. App. 4th 322, 332. "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data." (CEQA Guidelines §15064(b)).

In determining whether a project may have a significant effect on the environment, CEQA Guidelines Section 15064.7 provides that lead agencies may adopt and/or apply "thresholds of significance." A threshold of significance is "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant" (CEQA Guidelines §15064.7).

While thresholds of significance give rise to a presumption of insignificance, thresholds are not conclusive, and do not excuse a public agency of the duty to consider evidence that a significant effect may occur under the fair argument standard. *Meija*, 130 Cal. App. 4th at 342. "A public agency cannot apply a threshold of significance or regulatory standard 'in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.'" *Id.* This means that if a public agency is presented with factual information or other substantial evidence establishing a fair argument that a project may have a significant effect on the environment, the agency must prepare an EIR to study those impacts even if the project's impacts fall below the applicable threshold of significance.

---

<sup>1</sup> "Substantial evidence" includes facts, reasonable assumptions predicated upon facts, or expert opinions supported by facts, but does not include argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment. Cal. Pub. Res. C. §21080(c); *see also* CEQA Guidelines §15384.

<sup>2</sup> A "significant effect" on the environment is defined as a "substantial, or potentially substantial, adverse change in the environment." Cal. Pub. Res. C. §21068; *see also* CEQA Guidelines §15382.

Thresholds of significance must be supported by substantial evidence. This Report provides the substantial evidence in support of the thresholds of significance developed by the BAAQMD. If adopted by the BAAQMD Board of Directors, the Air District will recommend that lead agencies within the nine counties of the BAAQMD's jurisdiction use the thresholds of significance in this Report when considering the air quality impacts of projects under their consideration.

## **1.2 JUSTIFICATION FOR UPDATING CEQA THRESHOLDS**

Any analysis of environmental impacts under CEQA includes an assessment of the nature and extent of each impact expected to result from the project to determine whether the impact will be treated as significant or less than significant. CEQA gives lead agencies discretion whether to classify a particular environmental impact as significant. Ultimately, formulation of a standard of significance requires the lead agency to make a policy judgment about where the line should be drawn distinguishing adverse impacts it considers significant from those that are not deemed significant. This judgment must, however, be based on scientific information and other factual data to the extent possible (CEQA Guidelines §15064(b)).

In the sense that advances in science provide new or refined factual data, combined with advances in technology and the gradual improvement or degradation of an environmental resource, the point where an environmental effect is considered significant is fluid over time. Other factors influencing this fluidity include new or revised regulations and standards, and emerging, new areas of concern.

In the ten years since BAAQMD last reviewed its recommended CEQA thresholds of significance for air quality, there have been tremendous changes that affect the quality and management of the air resources in the Bay Area. Traditional criteria air pollutant ambient air quality standards, at both the state and federal levels, have become increasingly more stringent. A new criteria air pollutant standard for fine particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) has been added to federal and state ambient air quality standards. We have found, through technical advances in impact assessment, that toxic air contaminants are not only worse than previously thought from a health perspective, but that certain communities experience high levels of toxic air contaminants, giving rise to new regulations and programs to reduce the significantly elevated levels of ambient toxic air contaminant concentrations in the Bay Area.

In response to the elevated levels of toxic air contaminants in some Bay Area communities, the Air District created the Community Air Risk Evaluation (CARE) Program. Phase 1 of the BAAQMD's CARE program compiled and analyzed a regional emissions inventory of toxic air contaminants (TACs), including emissions from stationary sources, area sources, and on-road and off-road mobile sources. Phase 2 of the CARE Program conducted regional computer modeling of selected TAC species, species which collectively posed the greatest risk to Bay Area residents. In both Phases 1 and 2, demographic data were combined with estimates of TAC emissions or concentrations to identify communities that are disproportionately impacted from high concentrations of TACs. Bay Area Public Health Officers, in discussions with Air District staff and in comments

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

to the Air District's Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health), have recommended that PM<sub>2.5</sub>, in addition to TACs, be considered in assessments of community-scale impacts of air pollution.

Another significant issue that affects the quality of life for Bay Area residents is the growing concern with global climate change. In just the past few years, estimates of the global atmospheric temperature and greenhouse gas concentration limits needed to stabilize climate change have been adjusted downward and the impacts of greenhouse gas emissions considered more dire. Previous scientific assessments assumed that limiting global temperature rise to 2-3°C above pre-industrial levels would stabilize greenhouse gas concentrations in the range of 450-550 parts per million (ppm) of carbon dioxide-equivalent (CO<sub>2</sub>e). Now the science indicates that a temperature rise of 2°C would not prevent dangerous interference with the climate system. Recent scientific assessments suggest that global temperature rise should be kept below 2°C by stabilizing greenhouse gas concentrations below 350 ppm CO<sub>2</sub>e, a significant reduction from the current level of 385 ppm CO<sub>2</sub>e.

For the reasons stated above, and to further the goals of other District programs such as encouraging transit-oriented and infill development, BAAQMD has undertaken an effort to review all of its currently-recommended CEQA thresholds, revise them as appropriate, and develop new thresholds where appropriate. The overall goal of this effort is to develop CEQA significance criteria that ensure new development implements appropriate and feasible emission reduction measures to mitigate significant air quality impacts. The Air District's recommended CEQA significance thresholds have been vetted through a public review process and will be presented to the BAAQMD Board of Directors for adoption.

<b>Table 1 – Proposed Air Quality CEQA Thresholds of Significance</b>			
<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>	
<b>Project-Level</b>			
<b>Criteria Air Pollutants and Precursors (Regional)</b>	<b>Average Daily Emissions (lb/day)</b>	<b>Average Daily Emissions (lb/day)</b>	<b>Maximum Annual Emissions (tpy)</b>
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub> (exhaust)	82	82	15
PM <sub>2.5</sub> (exhaust)	54	54	10
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 1 – Proposed Air Quality CEQA Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>
<b>GHGs</b> <b>Projects other than Stationary Sources</b>	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO <sub>2</sub> e/yr OR 4.6 MT CO <sub>2</sub> e/SP/yr (residents + employees)
<b>GHGs</b> <b>Stationary Sources</b>	None	10,000 MT/yr
<b>Risks and Hazards – New Source (All Areas)</b> (Individual Project)  <b><u>Staff Proposal</u></b>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase: > 0.3 µg/m <sup>3</sup> annual average  <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
<b>Risks and Hazards – New Receptor (All Areas)</b> (Individual Project)  <b><u>Staff Proposal</u></b>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase: > 0.3 µg/m <sup>3</sup> annual average  <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor
<b>Risks and Hazards</b> (Individual Project)  <b><u>Tiered Thresholds Option</u></b>	Same as Operational Thresholds*	<b><u>Impacted Communities: Siting a New Source</u></b>  Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase: > 0.2 µg/m <sup>3</sup> annual average  <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 1 – Proposed Air Quality CEQA Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>
<p><b>Risks and Hazards</b> (Individual Project)</p> <p><b><u>Tiered Thresholds Option</u></b> (Continued)</p>	<p>Same as Operational Thresholds*</p>	<p><b><u>Impacted Communities:</u></b> Siting a New Receptor <b><u>All Other Areas:</u></b> Siting a New Source or Receptor</p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of &gt;10.0 in a million Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute) Ambient PM<sub>2.5</sub> increase: &gt; 0.3 µg/m<sup>3</sup> annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p><b>Risks and Hazards – New Source (All Areas)</b> (Cumulative Thresholds)</p>	<p>Same as Operational Thresholds*</p>	<p>Compliance with Qualified Community Risk Reduction Plan OR Cancer: &gt; 100 in a million (from all local sources) Non-cancer: &gt; 10.0 Hazard Index (from all local sources) (Chronic) PM<sub>2.5</sub>: &gt; 0.8 µg/m<sup>3</sup> annual average (from all local sources)</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p><b>Risks and Hazards – New Receptor (All Areas)</b> (Cumulative Thresholds)</p>	<p>Same as Operational Thresholds*</p>	<p>Compliance with Qualified Community Risk Reduction Plan OR Cancer: &gt; 100 in a million (from all local sources) Non-cancer: &gt; 10.0 Hazard Index (from all local sources) (Chronic) PM<sub>2.5</sub>: &gt; 0.8 µg/m<sup>3</sup> annual average (from all local sources)</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p><b>Accidental Release of Acutely Hazardous Air Pollutants</b></p>	<p>None</p>	<p>Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant</p>
<p><b>Odors</b></p>	<p>None</p>	<p>Complaint History—Five confirmed complaints per year averaged over three years</p>

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 1 – Proposed Air Quality CEQA Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>
<b>Plan-Level</b>		
<b>Criteria Air Pollutants and Precursors</b>	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
<b>GHGs</b>	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO <sub>2</sub> e/ SP/yr (residents + employees)
<b>Risks and Hazards</b>	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
<b>Odors</b>	None	Identify the location of existing and planned sources of odors
<b>Accidental Release of Acutely Hazardous Air Pollutants</b>	None	None
<b>Regional Plans (Transportation and Air Quality Plans)</b>		
<b>GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants</b>	None	No net increase in emissions
Notes: CO = carbon monoxide; CO <sub>2</sub> e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO <sub>x</sub> = oxides of nitrogen; PM <sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM <sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO <sub>2</sub> = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr = year. * Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.		

## 2 GREENHOUSE GAS THRESHOLDS

BAAQMD does not currently have an adopted threshold of significance for GHG emissions. BAAQMD currently recommends that lead agencies quantify GHG emissions resulting from new development and apply all feasible mitigation measures to lessen the potentially significant adverse impacts. One of the primary objectives in updating the current CEQA Guidelines is to identify a GHG significance threshold, analytical

methodologies, and mitigation measures to ensure new land use development meets its fair share of the emission reductions needed to address the cumulative environmental impact from GHG emissions. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. As reviewed herein, climate change impacts include an increase in extreme heat days, higher ambient concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts.

## 2.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Project Type	Proposed Thresholds
<b>Projects other than Stationary Sources</b>	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO <sub>2</sub> e/yr OR 4.6 MT CO <sub>2</sub> e/SP/yr (residents + employees)
<b>Stationary Sources</b>	10,000 MT of CO <sub>2</sub> e/yr
<b>Plans</b>	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO <sub>2</sub> e/SP/yr (residents + employees)
<b>Regional Plans (Transportation and Air Quality Plans)</b>	No net increase in GHG emissions

## 2.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant.

As explained in the District's *Revised Draft Options and Justifications Report* (BAAQMD 2009), there are several types of thresholds that may be supported by

substantial evidence and be consistent with existing California legislation and policy to reduce statewide GHG emissions. In determining which thresholds to recommend, Staff studied numerous options, relying on reasonable, environmentally conservative assumptions on growth in the land use sector, predicted emissions reductions from statewide regulatory measures and resulting emissions inventories, and the efficacies of GHG mitigation measures. The thresholds recommended herein were chosen based on the substantial evidence that such thresholds represent quantitative and/or qualitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state's ability to meet its goals of reduced statewide GHG emissions. Staff notes that it does not believe there is only one threshold for GHG emissions that can be supported by substantial evidence.

GHG CEQA significance thresholds recommended herein are intended to serve as interim levels during the implementation of the AB 32 Scoping Plan and SB 375, which will occur over time. Until AB 32 has been fully implemented in terms of adopted regulations, incentives, and programs and until SB 375 required plans have been fully adopted, or the California Air Resources Board (ARB) adopts a recommended threshold, the BAAQMD recommends that local agencies in the Bay Area apply the GHG thresholds recommended herein.

If left unchecked, GHG emissions from new land use development in California will result in a cumulatively considerable amount of GHG emissions and a substantial conflict with the State's ability to meet the goals within AB 32. Thus, BAAQMD proposes to adopt interim GHG thresholds for CEQA analysis, which can be used by lead agencies within the Bay Area. This would help lead agencies navigate this dynamic regulatory and technological environment where the field of analysis has remained wide open and inconsistent. BAAQMD's framework for developing a GHG threshold for land development projects that is based on policy and substantial evidence follows.

### **2.3.1 SCIENTIFIC AND REGULATORY JUSTIFICATION**

#### ***Climate Science Overview***

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, chlorofluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is *extremely unlikely* that global climate change of the past 50 years can be explained without the contribution from human activities (IPCC 2007a).

According to Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC), "Avoiding Dangerous Climate Change" means: "*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*" Dangerous climate change defined

in the UNFCCC is based on several key indicators including the potential for severe degradation of coral reef systems, disintegration of the West Antarctic Ice Sheet, and shut down of the large-scale, salinity- and thermally-driven circulation of the oceans. (UNFCCC 2009). The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005 (IPCC 2007a). “Avoiding dangerous climate change” is generally understood to be achieved by stabilizing global average temperatures between 2 and 2.4°C above pre-industrial levels. In order to limit temperature increases to this level, ambient global CO<sub>2</sub> concentrations must stabilize between 350 and 400 ppm (IPCC 2007b).

***Executive Order S-3-05***

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra’s snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

***Assembly Bill 32, the California Global Warming Solutions Act of 2006***

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill 32, the California Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. AB 32 finds and declares that “Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020, and establishes regulatory, reporting, voluntary, and market mechanisms to achieve quantifiable reductions in GHG emissions to meet the statewide goal.

In December of 2008, ARB adopted its *Climate Change Scoping Plan (Scoping Plan)*, which is the State’s plan to achieve GHG reductions in California, as required by AB 32 (ARB 2008). The Scoping Plan contains strategies California will implement to achieve a reduction of 169 MMT CO<sub>2</sub>e emissions, or approximately 28 percent from the state’s projected 2020 emission level of 596 MMT of CO<sub>2</sub>e under a business-as-usual scenario (this is a reduction of 42 MMT of CO<sub>2</sub>e, or almost 10 percent, from 2002-2004 average emissions), so that the state can return to 1990 emission levels, as required by AB 32.

While the Scoping Plan establishes the policy intent to control numerous GHG sources through regulatory, incentive, and market means, given the early phase of implementation and the level of control that local CEQA lead agencies have over numerous GHG sources, CEQA is an important and supporting tool in achieving GHG reductions overall in compliance with AB 32. In this spirit, BAAQMD is considering the adoption of thresholds of significance for GHG emissions for stationary source and land use development projects.

### ***Senate Bill 375***

Senate Bill (SB) 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emission technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for State funding programmed after January 1, 2012. New provisions of CEQA incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

The revised District CEQA Guidelines includes methodology consistent with the recently updated State CEQA Guidelines, which provides that certain residential and mixed use projects, and transit priority projects consistent with an applicable SCS or APS need not analyze GHG impacts from cars and light duty trucks (CEQA Guidelines §15183.5(c)).

## **2.3.2 PROJECT-LEVEL GHG THRESHOLDS**

Staff recommends setting GHG significance thresholds based on AB 32 GHG emission reduction goals while taking into consideration emission reduction strategies outlined in ARB's Scoping Plan. Staff proposes two quantitative thresholds for land use projects: a bright line threshold based on a "gap" analysis and an efficiency threshold based on emission levels required to be met in order to achieve AB 32 goals.

Staff also proposes one qualitative threshold for land use projects: if a project complies with a Qualified Greenhouse Gas Reduction Strategy (as defined in Section 2.3.4 below) that addresses the project it would be considered less than significant. As explained in detail in Section 2.3.4 below, compliance with a Qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs), would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measureable, and verifiable GHG reductions consistent with broad state goals such that projects approved under qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

### **2.3.2.1 LAND USE PROJECTS "GAP-BASED" THRESHOLD**

Staff took eight steps in developing this threshold approach, which are summarized here and detailed in the sections that follow. It should be noted that the "gap-based approach" used for threshold development is a conservative approach that focuses on a limited set of state mandates that appear to have the greatest potential to reduce land use development-

related GHG emissions at the time of this writing. It is also important to note that over time, as the effectiveness of the State's implementation of AB 32 (and SB 375) progresses, BAAQMD will need to reconsider the extent of GHG reductions needed over and above those from the implementation thereof for the discretionary approval of land use development projects. Although there is an inherent amount of uncertainty in the estimated capture rates (i.e., frequency at which project-generated emissions would exceed a threshold and would be subject to mitigation under CEQA) and the aggregate emission reductions used in the gap analysis, they are based on BAAQMD's expertise, the best available data, and use conservative assumptions for the amount of emission reductions from legislation in derivation of the gap (e.g., only adopted legislation was relied upon). This approach is intended to attribute an appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD's jurisdiction that are evaluated pursuant to CEQA.

Step 1 Estimate from ARB's statewide GHG emissions inventory the growth in emissions between 1990 and 2020 attributable to "land use-driven" sectors of the emission inventory as defined by OPR's guidance document (*CEQA and Climate Change*). Land use-driven emission sectors include Transportation (On-Road Passenger Vehicles; On-Road Heavy Duty), Electric Power (Electricity; Cogeneration), Commercial and Residential (Residential Fuel Use; Commercial Fuel Use) and Recycling and Waste (Domestic Waste Water Treatment).

Result: 1990 GHG emissions were 295.53 MMT CO<sub>2</sub>e/yr and projected 2020 business-as-usual GHG emissions would be 400.22 MMT CO<sub>2</sub>e/yr; thus a 26.2 percent reduction from statewide land use-driven GHG emissions would be necessary to meet the AB 32 goal of returning to 1990 emission levels by 2020. (See Table 2)

Step 2 Estimate the anticipated GHG emission reductions affecting the same land use-driven emissions inventory sectors associated with adopted statewide regulations identified in the AB 32 Scoping Plan.

Result: Estimated a 23.9 percent reduction can be expected in the land use-driven GHG emissions inventory from adopted Scoping Plan regulations, including AB 1493 (Pavley), LCFS, Heavy/Medium Duty Efficiency, Passenger Vehicle Efficiency, Energy-Efficiency Measures, Renewable Portfolio Standard, and Solar Roofs. (See Table 3)

Step 3 Determine any short fall or "gap" between the 2020 statewide emission inventory estimates and the anticipated emission reductions from adopted Scoping Plan regulations. This "gap" represents additional GHG emission reductions needed statewide from the land use-driven emissions inventory sectors, which represents new land use development's share of the emission reductions needed to meet statewide GHG emission reduction goals.

Result: With the 23.9 percent reductions from AB 32 Scoping Measures, there is a “gap” of 2.3 percent in necessary additional GHG emissions reductions to meet AB 32 goals of a 26.2 percent reduction from statewide land use-driven GHG emissions to return to 1990 levels in 2020. (See Table 2)

Step 4 Determine the percent reduction this “gap” represents in the “land use-driven” emissions inventory sectors from BAAQMD’s 2020 GHG emissions inventory. Identify the mass of emission reductions needed in the SFBAAB from land use-driven emissions inventory sectors.

Result: Estimated that a 2.3 percent reduction in BAAQMD’s projected 2020 emissions projections requires emissions reductions of 1.6 MMT CO<sub>2</sub>e/yr from the land use-driven sectors. (See Table 4)

Step 5 Assess BAAQMD’s historical CEQA database (2001-2008) to determine the frequency distribution trend of project sizes and types that have been subject to CEQA over the past several years.

Result: Determined historical patterns of residential, commercial and industrial development by ranges of average sizes of each development type. Results were used in Step 6 below to distribute anticipated Bay Area growth among different future project types and sizes.

Step 6 Forecast new land use development for the Bay Area using DOF/EDD population and employment projections and distribute the anticipated growth into appropriate land use types and sizes needed to accommodate the anticipated growth (based on the trend analysis in Step 5 above). Translate the land use development projections into land use categories consistent with those contained in the Urban Emissions Model (URBEMIS).

Result: Based on population and employment projections and the trend analysis from Step 5 above, forecasted approximately 4,000 new development projects, averaging about 400 projects per year through 2020 in the Bay Area.

Step 7 Estimate the amount of GHG emissions from each land use development project type and size using URBEMIS and post-model manual calculation methods (for emissions not included in URBEMIS). Determine the amount of GHG emissions that can reasonably and feasibly be reduced through currently available mitigation measures (“mitigation effectiveness”) for future land use development projects subject to CEQA (based on land use development projections and frequency distribution from Step 6 above).

Result: Based on the information available and on sample URBEMIS calculations, found that mitigation effectiveness of between 25 and 30 percent is feasible.

Step 8 Conduct a sensitivity analysis of the numeric GHG mass emissions threshold needed to achieve the desired emissions reduction (i.e., “gap”) determined in Step 4. This mass emission GHG threshold is that which would be needed to achieve the emission reductions necessary by 2020 to meet the Bay Area’s share of the statewide “gap” needed from the land use-driven emissions inventory sectors.

Result: The results of the sensitivity analysis conducted in Step 8 found that reductions between about 125,000 MT/yr (an aggregate of 1.3 MMT in 2020) and over 200,000 MT/yr (an aggregate of over 2.0 MMT in 2020) were achievable and feasible. A mass emissions threshold of 1,100 MT of CO<sub>2</sub>e/yr would result in approximately 59 percent of all projects being above the significance threshold (e.g., this is approximately the operational GHG emissions that would be associated with a 60 residential unit subdivision) and must implement feasible mitigation measures to meet CEQA requirements. With an estimated 26 percent mitigation effectiveness, the 1,100 MT threshold would achieve 1.6 MMT CO<sub>2</sub>e/yr in GHG emissions reductions.

### **2.3.2.2 DETAILED BASIS AND ANALYSIS**

#### ***Derivation of Greenhouse Gas Reduction Goal***

To meet the target emissions limit established in AB 32 (equivalent to levels in 1990), total GHG emissions would need to be reduced by approximately 28 percent from projected 2020 forecasts (ARB 2009a). The AB 32 Scoping Plan is ARB’s plan for meeting this mandate (ARB 2008). While the Scoping Plan does not specifically identify GHG emission reductions from the CEQA process for meeting AB 32 derived emission limits, the scoping plan acknowledges that “other strategies to mitigate climate change . . . should also be explored.” The Scoping Plan also acknowledges that “Some of the measures in the plan may deliver more emission reductions than we expect; others less . . . and new ideas and strategies will emerge.” In addition, climate change is considered a significant environmental issue and, therefore, warrants consideration under CEQA. SB 97 represents the State Legislature’s confirmation of this fact, and it directed the Governor’s Office of Planning and Research (OPR) to develop CEQA Guidelines for evaluation of GHG emissions impacts and recommend mitigation strategies. In response, OPR released the *Technical Advisory: CEQA and Climate Change* (OPR 2008), and proposed revisions to the State CEQA guidelines (April 14, 2009) for consideration of GHG emissions. The California Natural Resources Agency adopted the proposed State CEQA Guidelines revisions on December 30, 2009 and the revisions were effective beginning March 18, 2010. It is known that new land use development must also do its fair share toward achieving AB 32 goals (or, at a minimum, should not hinder the State’s progress toward the mandated emission reductions).

***Foreseeable Scoping Plan Measures Emission Reductions and Remaining “Gap”***

Step 1 of the Gap Analysis entailed estimating from ARB’s statewide GHG inventory the growth in emissions between 1990 and 2020 attributable to land use driven sectors of the emissions inventory. As stated above, to meet the requirements set forth in AB 32 (i.e., achieve California’s 1990-equivalent GHG emissions levels by 2020) California would need to achieve an approximate 28 percent reduction in emissions across all sectors of the GHG emissions inventory compared with 2020 projections. However, to meet the AB 32 reduction goals in the emissions sectors that are related to land use development (e.g., on-road passenger and heavy-duty motor vehicles, commercial and residential area sources [i.e., natural gas], electricity generation/consumption, wastewater treatment, and water distribution/consumption), staff determined that California would need to achieve an approximate 26 percent reduction in GHG emissions from these land use-driven sectors (ARB 2009a) by 2020 to return to 1990 land use emission levels.

Next, in Step 2 of the Gap Analysis, Staff determined the GHG emission reductions within the land use-driven sectors that are anticipated to occur from implementation of the Scoping Plan measures statewide, which are summarized in Table 2 and described below. Since the GHG emission reductions anticipated with the Scoping Plan were not accounted for in ARB’s or BAAQMD’s 2020 GHG emissions inventory forecasts (i.e., business as usual), an adjustment was made to include (i.e., give credit for) GHG emission reductions associated with key Scoping Plans measures, such as the Renewable Portfolio Standard, improvements in energy efficiency through periodic updates to Title 24, AB 1493 (Pavley) (which recently received a federal waiver to allow it to be enacted in law), the Low Carbon Fuel Standard (LCFS), and other measures. With reductions from these State regulations (Scoping Plan measures) taken into consideration and accounting for an estimated 23.9 percent reduction in GHG emissions, in Step 3 of the Gap Analysis Staff determined that the Bay Area would still need to achieve an additional 2.3 percent reduction from projected 2020 GHG emissions to meet the 1990 GHG emissions goal from the land-use driven sectors. This necessary 2.3 percent reduction in projected GHG emissions from the land use sector is the “gap” the Bay Area needs to fill to do its share to meet the AB 32 goals. Refer to the following explanation and Tables 2 through 4 for data used in this analysis.

Because the transportation sector is the largest emissions sector of the state’s GHG emissions inventory, it is aggressively targeted in early actions and other priority actions in the Scoping Plan including measures concerning gas mileage (Pavley), fuel carbon intensity (LCFS) and vehicle efficiency measures.

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 2 – California 1990, 2002-2004, and 2020 Land Use Sector GHG<sup>1</sup></b> (MMT CO <sub>2</sub> e/yr)				
Sector	1990 Emissions	2002-2004 Average	2020 BAU Emissions Projections	% of 2020 Total
<b>Transportation</b>	<b>137.98</b>	<b>168.66</b>	<b>209.06</b>	<b>52%</b>
On-Road Passenger Vehicles	108.95	133.95	160.78	40%
On-Road Heavy Duty	29.03	34.69	48.28	12%
<b>Electric Power</b>	<b>110.63</b>	<b>110.04</b>	<b>140.24</b>	<b>35%</b>
Electricity	95.39	88.97	107.40	27%
Cogeneration <sup>2</sup>	15.24	21.07	32.84	8%
<b>Commercial and Residential</b>	<b>44.09</b>	<b>40.96</b>	<b>46.79</b>	<b>12%</b>
Residential Fuel Use	29.66	28.52	32.10	8%
Commercial Fuel Use	14.43	12.45	14.63	4%
<b>Recycling and Waste<sup>1</sup></b>	<b>2.83</b>	<b>3.39</b>	<b>4.19</b>	<b>1%</b>
Domestic Wastewater Treatment	2.83	3.39	4.19	1%
<b>TOTAL GROSS EMISSIONS</b>	<b>295.53</b>	<b>323.05</b>	<b>400.22</b>	
% Reduction Goal from Statewide land use driven sectors (from 2020 levels to reach 1990 levels in these emission inventory sectors)			26.2%	
% Reduction from AB32 Scoping Plan measures applied to land use sectors (see Table 3)			-23.9%	
% Reduction needed statewide beyond Scoping Plan measures (Gap)			2.3%	
Notes: MMT CO <sub>2</sub> e /yr = million metric tons of carbon dioxide equivalent emissions per year.				
<sup>1</sup> Landfills not included. See text.				
<sup>2</sup> Cogeneration included due to many different applications for electricity, in some cases provides substantial power for grid use, and because electricity use served by cogeneration is often amenable to efficiency requirements of local land use authorities.				
Sources: Data compiled by EDAW and ICF Jones & Stokes from ARB data.				

Pavley Regulations. The AB 32 Scoping Plan assigns an approximate 20 percent reduction in emissions from passenger vehicles associated with the implementation of AB 1493. The AB 32 Scoping Plan also notes that “AB 32 specifically states that if the Pavley regulations do not remain in effect, ARB shall implement alternative regulations to control mobile sources to achieve equivalent or greater reductions of greenhouse gas emissions (HSC §38590).” Thus, it is reasonable to assume full implementation of AB 1493 standards, or equivalent programs that would be implemented by ARB. Furthermore, on April 1, 2010, U.S. EPA and the Department of Transportation’s National Highway Safety Administration (NHTSA) announced a joint final rule establishing a national program that will dramatically reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States after 2011. Under this national program, automobile manufacturers will be able to build a single light-duty national fleet that satisfies all requirements under both the national program and the standards of California and other states. Nonetheless, BAAQMD may need to revisit this methodology as the federal standards come on line to ensure that vehicle standards are as aggressive as contemplated in development of this threshold.

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 3 – 2020 Land Use Sector GHG Emission Reductions from State Regulations and AB 32 Measures</b>				
<b>Affected Emissions Source</b>	<b>California Legislation</b>	<b>% Reduction from 2020 GHG inventory</b>	<b>End Use Sector (% of Bay Area LU Inventory)</b>	<b>Scaled % Emissions Reduction (credit)</b>
Mobile	AB 1493 (Pavley)	19.7%	On road passenger/light truck transportation (45%)	8.9%
	LCFS	7.2%	On road passenger/light truck transportation (45%)	3.2%
	LCFS	7.2%	On road Heavy/Medium Duty Transportation (5%)	0.4%
	Heavy/Medium Duty Efficiency	2.9%	On road Heavy/Medium Duty Transportation (5%)	0.2%
	Passenger Vehicle Efficiency	2.8%	On road passenger/light truck transportation (45%)	1.3%
Area	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
			Natural gas (Non-residential, 13%)	1.2%
Indirect	Renewable Portfolio Standard	21.0%	Electricity (excluding cogen) (17%)	3.5%
	Energy-Efficiency Measures	15.7%	Electricity (26%)	4.0%
	Solar Roofs	1.5%	Electricity (excluding cogen) (17%)	0.2%
Total credits given to land use-driven emission inventory sectors from Scoping Plan measures				<b>23.9%</b>
Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; SB = Senate Bill; RPS = Renewable Portfolio Standard Please refer to Appendix D for detailed calculations. Sources: Data compiled by ICF Jones & Stokes.				

LCFS. According to the adopted LCFS rule (CARB, April 2009), the LCFS is expected to result in approximately 10 percent reduction in the carbon intensity of transportation fuels. However, a portion of the emission reductions required from the LCFS would be achieved over the life cycle of transportation fuel production rather than from mobile-source emission factors. Based on CARB’s estimate of nearly 16 MMT reductions in on-road emissions from implementation of the LCFS and comparison to the statewide on-road emissions sector, the LCFS is assumed to result in a 7.2 percent reduction compared to 2020 BAU conditions (CARB 2009e).

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 4 – SFBAAB 1990, 2007, and 2020 Land Use Sector GHG Emissions Inventories and Projections (MMT CO<sub>2</sub>e/yr)</b>				
Sector	1990 Emissions	2007 Emissions	2020 Emissions Projections	% of 2020 Total <sup>2</sup>
<b>Transportation</b>	<b>26.1</b>	<b>30.8</b>	<b>35.7</b>	<b>50%</b>
On-Road Passenger Vehicles	23.0	27.5	32.0	
On-Road Heavy Duty	3.1	3.3	3.7	
<b>Electric Power</b>	<b>25.1</b>	<b>15.2</b>	<b>18.2</b>	<b>26%</b>
Electricity	16.5	9.9	11.8	
Cogeneration	8.6	5.3	6.4	
<b>Commercial and Residential</b>	<b>8.9</b>	<b>15.0</b>	<b>16.8</b>	<b>24%</b>
Residential Fuel Use	5.8	7.0	7.5	
Commercial Fuel Use	3.1	8.0	9.3	
<b>Recycling and Waste<sup>1</sup></b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>1%</b>
Domestic Waste Water Treatment	0.2	0.4	0.4	
<b>TOTAL GROSS EMISSIONS</b>	<b>60.3</b>	<b>61.4</b>	<b>71.1</b>	
SFBAAB's "Fair Share" % Reduction (from 2020 levels to reach 1990 levels) with AB-32 Reductions (from Table 3)			2.3%	
SFBAAB's Equivalent Mass Emissions Land Use Reduction Target at 2020 (MMT CO <sub>2</sub> e/yr)			1.6	
Notes: MMT CO <sub>2</sub> e /yr = million metric tons of carbon dioxide equivalent emissions per year; SFBAAB = San Francisco Bay Area Air Basin.				
<sup>1</sup> Landfills not included.				
<sup>2</sup> Percentages do not sum exactly to 100% in table due to rounding.				
Please refer to Appendix D for detailed calculations.				
Sources: Data compiled by EDAW 2009, ICF Jones & Stokes 2009, BAAQMD 2008.				

Renewable Portfolio Standard, Energy Efficiency and Solar Roofs. Energy efficiency and renewable energy measures from the Scoping Plan were also included in the gap analysis. The Renewable Portfolio Standard (rules) will require the renewable energy portion of the retail electricity portfolio to be 33 percent in 2020. For PG&E, the dominant electricity provider in the Basin, approximately 12 percent of their current portfolio qualifies under the RPS rules and thus the gain by 2020 would be approximately 21 percent. The Scoping Plan also estimates that energy efficiency gains with periodic improvement in building and appliance energy standards and incentives will reach 10 to 15 percent for natural gas and electricity respectively. The final state measure included in this gap analysis is the solar roof initiative, which is estimated to result in reduction of the overall electricity inventory of 1.5 percent.

Landfill emissions are excluded from this analysis. While land use development does generate waste related to both construction and operations, the California Integrated Waste Management Board (CIWMB) has mandatory diversion requirements that will, in all probability, increase over time to promote waste reductions, reuse, and recycle. The Bay Area has relatively high levels of waste diversion and extensive recycling efforts. Further, ARB has established and proposes to increase methane capture requirements for all major landfills. Thus, at this time, landfill emissions associated with land use

development waste generation is not included in the land use sector inventory used to develop this threshold approach.

Industrial stationary sources thresholds were developed separately from the land use threshold development using a market capture approach as described below. However, mobile source and area source emissions, as well as indirect electricity emissions that derive from industrial use are included in the land use inventory above as these particular activities fall within the influence of local land use authorities in terms of the affect on trip generation and energy efficiency.

AB 32 mandates reduction to 1990-equivalent GHG levels by 2020, with foreseeable emission reductions from State regulations and key Scoping Plan measures taken into account, were applied to the land use-driven emission sectors within the SFBAAB (i.e., those that are included in the quantification of emissions from a land use project pursuant to a CEQA analysis [on-road passenger vehicles, commercial and residential natural gas, commercial and residential electricity consumption, and domestic waste water treatment], as directed by OPR in the Technical Advisory: *Climate Change and CEQA* [OPR 2008]). This translates to a 2.3 percent gap in necessary GHG emission reductions by 2020 from these sectors.

#### **2.3.2.3 LAND USE PROJECTS BRIGHT LINE THRESHOLD**

In Steps 4 and 5 of the gap analysis, Staff determined that applying a 2.3 percent reduction to these land use emissions sectors in the SFBAAB's GHG emissions inventory would result in an equivalent fair share of 1.6 million metric tons per year (MMT/yr) reductions in GHG emissions from new land use development. As additional regulations and legislation aimed at reducing GHG emissions from land use-related sectors become available in the future, the 1.6 MMT GHG emissions reduction goal may be revisited and recalculated by BAAQMD.

In order to derive the 1.6 MMT "gap," a projected development inventory for the next ten years in the SFBAAB was calculated. (See Table 4 and *Revised Draft Options and Justifications Report* (BAAQMD 2009).) CO<sub>2</sub>e emissions were modeled for projected development in the SFBAAB and compiled to estimate the associated GHG emissions inventory. The GHG (i.e., CO<sub>2</sub>e) CEQA threshold level was adjusted for projected land use development that would occur within BAAQMD's jurisdiction over the period from 2010 through 2020.

Projects with emissions greater than the threshold would be required to mitigate to the threshold level or reduce project emissions by a percentage (mitigation effectiveness) deemed feasible by the Lead Agency under CEQA compared to a base year condition. The base year condition is defined by an equivalent size and character of project with annual emissions using the defaults in URBEMIS and the California Climate Action Registry's General Reporting Protocol for 2008. By this method, land use project mitigation subject to CEQA would help close the "gap" remaining after application of the key regulations and measures noted above supporting overall AB 32 goals.

This threshold takes into account Steps 1-8 of the gap analysis described above to arrive at a numerical mass emissions threshold. Various mass emissions significance threshold levels (i.e., bright lines) could be chosen based on the mitigation effectiveness and performance anticipated to be achieved per project to meet the aggregate emission reductions of 1.6 MMT needed in the SFBAAB by 2020. (See Table 5 and *Revised Draft Options and Justifications Report* (BAAQMD 2009).) Staff recommends a 1,100 MT CO<sub>2</sub>e per year threshold. Choosing a 1,100 MT mass emissions significance threshold level (equivalent to approximately 60 single-family units), would result in about 59 percent of all projects being above the significance threshold and having to implement feasible mitigation measures to meet their CEQA obligations. These projects account for approximately 92 percent of all GHG emissions anticipated to occur between now and 2020 from new land use development in the SFBAAB.

Project applicants and lead agencies could use readily available computer models to estimate a project's GHG emissions, based on project specific attributes, to determine if they are above or below the bright line numeric threshold. With this threshold, projects that are above the threshold level, after consideration of emission-reducing characteristics of the project as proposed, would have to reduce their emissions to below the threshold to be considered less than significant.

Establishing a "bright line" to determine the significance of a project's GHG emissions impact provides a level of certainty to lead agencies in determining if a project needs to reduce its GHG emissions through mitigation measures and when an EIR is required.

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

<b>Table 5 – Operational GHG Threshold Sensitivity Analysis</b>								
<b>Option</b>	<b>Mitigation Effectiveness Assumptions</b>		<b>Mass Emission Threshold Level (MT CO<sub>2</sub>e/yr)</b>	<b>% of Projects Captured (&gt;threshold)</b>	<b>% of Emissions Captured (&gt; threshold)</b>	<b>Emissions Reduction per year (MT/yr)</b>	<b>Aggregate Emissions Reduction (MMT) at 2020</b>	<b>Threshold Project Size Equivalent (single family dwelling units)</b>
	<b>Performance Standards Applied to All Projects with Emissions &lt; Threshold Level</b>	<b>Mitigation Effectiveness Applied to Emissions &gt; Threshold Level</b>						
1A	N/A	30%	975	60%	93%	201,664	2.0	53
1A	N/A	25%	110	96%	100%	200,108	2.0	66
1A	N/A	30%	1,225	21%	67%	159,276	1.6	67
1A	N/A	26%	1,100	59%	92%	159,877	1.6	60
1A	N/A	30%	2,000	14%	61%	143,418	1.4	109
1A	N/A	25%	1,200	58%	92%	136,907	1.4	66
1A	N/A	30%	3,000	10%	56%	127,427	1.3	164
1A	N/A	25%	1,500	20%	67%	127,303	1.3	82
1B	26%	N/A	N/A	100%	100%	208,594	2.1	N/A <sup>1</sup>
1C	5%	30%	1,900	15%	62%	160,073	1.6	104
1C	10%	25%	1,250	21%	67%	159,555	1.6	68
1C	5%	30%	3,000	10%	56%	145,261	1.5	164
1C	10%	25%	2,000	4%	61%	151,410	1.5	109
1C	10%	30%	10,000	2%	33%	125,271	1.3	547

Notes: MMT = million metric tons per year; MT CO<sub>2</sub>e/yr = metric tons of carbon dioxide equivalent emissions per year; MT/yr = metric tons per year; N/A = not applicable.  
<sup>1</sup> Any project subject to CEQA would trigger this threshold.  
Please refer to Appendix E for detailed calculations.  
Source: Data modeled by ICF Jones & Stokes.

**2.3.2.4 LAND USE PROJECTS EFFICIENCY-BASED THRESHOLD**

GHG efficiency metrics can also be utilized as thresholds to assess the GHG efficiency of a project on a per capita basis (residential only projects) or on a “service population” basis (the sum of the number of jobs and the number of residents provided by a project) such that the project will allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal (allowable emissions), by the estimated 2020 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32. Staff believes it is more appropriate to base the land use efficiency threshold on the service population metric for the land use-driven emission inventory. This approach is appropriate because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use) and uses only the land use emissions inventory that is comprised of all land use projects. Staff will provide the methodology to calculate a project’s GHG emissions in the revised CEQA Guidelines, such as allowing infill projects up to a 50 percent or more reduction in daily vehicle trips if the reduction can be supported by close proximity to transit and support services, or a traffic study prepared for the project.

<b>Table 6 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - Land Use Inventory Sectors</b>	
Land Use Sectors Greenhouse Gas Emissions Target	295,530,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO <sub>2</sub> e)/SP <sup>1</sup>	<b>4.6</b>
Notes: AB = Assembly Bill; CO <sub>2</sub> e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.	
<sup>1</sup> Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.	
Please refer to Appendix D for detailed calculations.	
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.	

Staff proposes a project-level efficiency threshold of 4.6 MT CO<sub>2</sub>e/SP, the derivation of which is shown Table 6. This efficiency-based threshold reflects very GHG-efficient projects. As stated previously and below, staff anticipates that significance thresholds (rebuttable presumptions of significance at the project level) will function on an interim basis only until adequate programmatic approaches are in place at the city, county, and regional level that will allow the CEQA streamlining of individual projects. (See State CEQA Guidelines §15183.5 [“Tiering and Streamlining the Analysis of Greenhouse Gas Emissions”]).

**2.3.3 PLAN-LEVEL GHG THRESHOLDS**

Staff proposes using a two step process for determining the significance of proposed plans and plan amendments for GHG. As a first step in assessing plan-level impacts, Staff

is proposing that agencies that have adopted a qualified Greenhouse Gas Reduction Strategy (or have incorporated similar criteria in their general plan) and the general plan is consistent with the Greenhouse Gas Reduction Strategy, the general plan would be considered less than significant. In addition, as discussed above for project-level GHG impacts, Staff is proposing an efficiency threshold to assess plan-level impacts. Staff believes a programmatic approach to limiting GHG emissions is appropriate at the plan-level. Thus, as projects consistent with the Greenhouse Gas Reduction Strategy are proposed, they may be able to tier off the plan and its environmental analysis.

### **2.3.3.1 GHG EFFICIENCY METRICS FOR PLANS**

For local land use plans, a GHG-efficiency metric (e.g., GHG emissions per unit) would enable comparison of a proposed general plan to its alternatives and to determine if the proposed general plan meets AB 32 emission reduction goals.

AB 32 identifies local governments as essential partners in achieving California's goal to reduce GHG emissions. Local governments have primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth and the changing needs of their jurisdiction. ARB has developed the Local Government Operations Protocol and is developing a protocol to estimate community-wide GHG emissions. ARB encourages local governments to use these protocols to track progress in reducing GHG emissions. ARB encourages local governments to institutionalize the community's strategy for reducing its carbon footprint in its general plan. SB 375 creates a process for regional integration of land development patterns and transportation infrastructure planning with the primary goal of reducing GHG emissions from the largest sector of the GHG emission inventory, light duty vehicles.

If the statewide AB 32 GHG emissions reduction context is established, GHG efficiency can be viewed independently from the jurisdiction in which the plan is located. Expressing projected 2020 mass of emissions from land use-related emissions sectors by comparison to a demographic unit (e.g., population and employment) provides evaluation of the GHG efficiency of a project in terms of what emissions are allowable while meeting AB 32 targets.

Two approaches were considered for efficiency metrics. The "service population" (SP) approach would consider efficiency in terms of the GHG emissions compared to the sum of the number of jobs and the number of residents at a point in time. The per capita option would consider efficiency in terms of GHG emissions per resident only. Staff recommends that the efficiency threshold for plans be based on all emission inventory sectors because, unlike land use projects, general plans comprise more than just land use related emissions (e.g. industrial). Further, Staff recommends that the plan threshold be based on the service population metric as general plans include a mix of residents and employees. The Service Population metric would allow decision makers to compare GHG efficiency of general plan alternatives that vary residential and non-residential development totals, encouraging GHG efficiency through improving jobs/housing balance. This approach would not give preference to communities that accommodate more residential (population-driven) land

uses than non-residential (employment driven) land uses which could occur with the per capita approach.

A SP-based GHG efficiency metric (see Table 7) was derived from the emission rates at the State level that would accommodate projected population and employment growth under trend forecast conditions, and the emission rates needed to accommodate growth while allowing for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020).

<b>Table 7 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - All Inventory Sectors</b>	
All Inventory Sectors Greenhouse Gas Emissions Target	426,500,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO <sub>2</sub> e)/SP <sup>1</sup>	<b>6.6</b>
Notes: AB = Assembly Bill; CO <sub>2</sub> e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.	
<sup>1</sup> Greenhouse gas efficiency levels were calculated using only the “land use-related” sectors of ARB’s emissions inventory.	
Please refer to Appendix D for detailed calculations.	
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.	

If a general plan demonstrates, through dividing the emissions inventory projections (MT CO<sub>2</sub>e) by the amount of growth that would be accommodated in 2020, that it could meet the GHG efficiency metrics proposed in this section (6.6 MT CO<sub>2</sub>e/SP from all emission sectors, as noted in Table 7), then the amount of GHG emissions associated with the general plan would be considered less than significant, regardless of its size (and magnitude of GHG emissions). In other words, the general plan would accommodate growth in a manner that would not hinder the State’s ability to achieve AB 32 goals, and thus, would be less than significant for GHG emissions and their contribution to climate change. The efficiency metric would not penalize well-planned communities that propose a large amount of development. Instead, the SP-based GHG efficiency metric acts to encourage the types of development that BAAQMD and OPR support (i.e., infill and transit-oriented development) because it tends to reduce GHG and other air pollutant emissions overall, rather than discourage large developments for being accompanied by a large mass of GHG emissions. Plans that are more GHG efficient would have no or limited mitigation requirements to help them complete the CEQA process more readily than plans that promote GHG inefficiencies, which will require detailed design of mitigation during the CEQA process and could subject a plan to potential challenge as to whether all feasible mitigation was identified and adopted. This type of threshold can shed light on a well-planned general plan that accommodates a large amount of growth in a GHG-efficient way.

When analyzing long-range plans, such as general plans, it is important to note that the planning horizon will often surpass the 2020 timeframe for implementation of AB 32. Executive Order S-3-05 establishes a more aggressive emissions reduction goal for the year 2050 of 80 percent below 1990 emissions levels. The year 2020 should be viewed as a milestone year, and the general plan should not preclude the community from a trajectory toward the 2050 goal. However, the 2020 timeframe is examined in this threshold evaluation because doing so for the 2050 timeframe (with respect to population, employment, and GHG emissions projections) would be too speculative. Advances in technology and policy decisions at the state level will be needed to meet the aggressive 2050 goals. It is beyond the scope of the analysis tools available at this time to examine reasonable emissions reductions that can be achieved through CEQA analysis in the year 2050. As the 2020 timeframe draws nearer, BAAQMD will need to reevaluate the threshold to better represent progress toward 2050 goals.

### **2.3.4 GREENHOUSE GAS REDUCTION STRATEGIES**

Finally, many local agencies have already undergone or plan to undergo efforts to create general or other plans that are consistent with AB 32 goals. The Air District encourages such planning efforts and recognizes that careful upfront planning by local agencies is invaluable to achieving the state's GHG reduction goals. If a project is consistent with an adopted Qualified Greenhouse Gas Reduction Strategy that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with CEQA Guidelines Sections 15064(h)(3) and 15183.5(b), which provides that a "lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."

A qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs) is one that is consistent with all of the AB 32 Scoping Plan measures and goals. The Greenhouse Gas Reduction Strategy should identify a land use design, transportation network, goals, policies and implementation measures that would achieve AB 32 goals. Strategies with horizon years beyond 2020 should consider continuing the downward reduction path set by AB 32 and move toward climate stabilization goals established in Executive Order S-3-05.

#### ***Qualified Greenhouse Gas Reduction Strategy***

A qualified Greenhouse Gas Reduction Strategy adopted by a local jurisdiction should include the following elements as described in the State CEQA Guidelines Section 15183.5. The District's revised CEQA Guidelines provides the methodology to determine if a Greenhouse Gas Reduction Strategy meets these requirements.

- (A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

- (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
- (C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- (E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;
- (F) Be adopted in a public process following environmental review.

***Local Climate Action Policies, Ordinances and Programs***

Air District staff recognizes that many communities in the Bay Area have been proactive in planning for climate change but have not yet developed a stand-alone Greenhouse Gas Reduction Strategy that meets the above criteria. Many cities and counties have adopted climate action policies, ordinances and program that may in fact achieve the goals of AB 32 and a qualified Greenhouse Gas Reduction Strategy. Staff recommends that if a local jurisdiction can demonstrate that its collective set of climate action policies, ordinances and other programs is consistent with AB 32 and State CEQA Guidelines Section 15183.5, includes requirements or feasible measures to reduce GHG emissions and achieves one of the following GHG emission reduction goals,<sup>3</sup> the AB 32 consistency demonstration should be considered equivalent to a qualified Greenhouse Gas Reduction Strategy:

- ▶ 1990 GHG emission levels,
- ▶ 15 percent below 2008 emission levels, or

Qualified Greenhouse Gas Reduction Strategies that are tied to the AB 32 reduction goals would promote reductions on a plan level without impeding the implementation of GHG-efficient development, and would recognize the initiative of many Bay Area communities who have already developed or are in the process of developing a GHG reduction plan. The details required above for a qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs) would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measureable, and verifiable GHG reductions consistent with broad state goals

---

<sup>3</sup> Lead agencies using consistency with their jurisdiction's climate action policies, ordinances and programs as a measure of significance under CEQA Guidelines section 15064(h)(3) and 15183.5(b) should ensure that the policies, ordinances and programs satisfy all of the requirements of that subsection before relying on them in a CEQA analysis.

such that projects approved under qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

#### **2.3.4.1 GHG THRESHOLDS FOR REGIONAL PLANS**

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District.

The Regional Transportation Plan (RTP), also called a Metropolitan Transportation Plan (MTP) or Long-Range Transportation Plan is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) to conduct long-range (minimum of 20 years) planning in their regions. MTC functions as both the regional transportation planning agency, a state designation, and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of the Bay Area's transportation system that includes mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The performance of this system affects such public policy concerns as air quality, environmental resource consumption, social equity, "smart growth," economic development, safety, and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process requires developing strategies for operating, managing, maintaining, and financing the area's transportation system in such a way as to advance the area's long-term goals.

The Air District periodically prepares and updates plans to achieve the goal of healthy air. Typically, a plan will analyze emissions inventories (estimates of current and future emissions from industry, motor vehicles, and other sources) and combine that information with air monitoring data (used to assess progress in improving air quality) and computer modeling simulations to test future strategies to reduce emissions in order to achieve air quality standards. Air quality plans usually include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources. Bay Area air quality plans are prepared with the cooperation of MTC, the Association of Bay Area Governments (ABAG) and the Bay Conservation and Development Commission (BCDC).

The proposed threshold of significance for regional plans is no net increase in emissions including greenhouse gas emissions. This threshold serves to answer the State CEQA Guidelines Appendix G sample question: "Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?"

#### **2.3.5 STATIONARY SOURCE GHG THRESHOLD**

Staff's recommended threshold for stationary source GHG emissions is based on estimating the GHG emissions from combustion sources for all permit applications submitted to the Air District in 2005, 2006 and 2007. The analysis is based only on CO<sub>2</sub>

emissions from stationary sources, as that would cover the vast majority of the GHG emissions due to stationary combustion sources in the SFBAAB. The estimated CO<sub>2</sub> emissions were calculated for the maximum permitted amount, i.e. emissions that would be emitted if the sources applying for a permit application operate at maximum permitted load and for the total permitted hours. All fuel types are included in the estimates. For boilers burning natural gas, diesel fuel is excluded since it is backup fuel and is used only if natural gas is not available. Emission values are estimated before any offsets (i.e., Emission Reduction Credits) are applied. GHG emissions from mobile sources, electricity use and water delivery associated with the operation of the permitted sources are not included in the estimates.

It is projected that a threshold level of 10,000 metric tons of CO<sub>2</sub>e per year would capture approximately 95 percent of all GHG emissions from new permit applications from stationary sources in the SFBAAB. That threshold level was calculated as an average of the combined CO<sub>2</sub> emissions from all stationary source permit applications submitted to the Air District during the three year analysis period.

Staff recommends this 10,000 MT of CO<sub>2</sub>/yr as it would address a broad range of combustion sources and thus provide for a greater amount of GHG reductions to be captured and mitigated through the CEQA process. As documented in the Scoping Plan, in order to achieve statewide reduction targets, emissions reductions need to be obtained through a broad range of sources throughout the California economy and this threshold would achieve this purpose. While this threshold would capture 95 percent of the GHG emissions from new permit applications, the threshold would do so by capturing only the large, significant projects. Permit applications with emissions above the 10,000 MT of CO<sub>2</sub>/yr threshold account for less than 10 percent of stationary source permit applications which represent 95 percent of GHG emissions from new permits analyzed during the three year analysis period.

This threshold would be considered an interim threshold and Air District staff will reevaluate the threshold as AB 32 Scoping Plan measures such as cap and trade are more fully developed and implemented at the state level.

### **2.3.6 SUMMARY OF JUSTIFICATION FOR GHG THRESHOLDS**

The bright-line numeric threshold of 1,100 MT CO<sub>2</sub>e/yr is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." This emissions rate is equivalent to a project size of approximately 60 single-family dwelling units, and approximately 59 percent of all future projects and 92 percent of all emissions from future projects would exceed this level. For projects that are above this bright-line cutoff level, emissions from these projects would still be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MT CO<sub>2</sub>e per service population or better for mixed-use projects. Projects with emissions above 1,100 MT CO<sub>2</sub>e/yr would therefore still be less than significant if they achieved project efficiencies below these levels. If projects as proposed exceed these levels, they would be required to implement mitigation measures to bring

them back below the 1,100 MT CO<sub>2</sub>e/yr bright-line cutoff or within the 4.6 MT CO<sub>2</sub>e Service Population efficiency threshold. If mitigation did not bring a project back within the threshold requirements, the project would be cumulatively significant and could be approved only with a Statement of Overriding Considerations and a showing that all feasible mitigation measures have been implemented. Projects' GHG emissions would also be less than significant if they comply with a Qualified Greenhouse Gas Reduction Strategy.

As explained in the preceding analyses of these thresholds, the greenhouse gas emissions from land use projects expected between now and 2020 built in compliance with these thresholds would be approximately 26 percent below BAU 2020 conditions and thus would be consistent with achieving an AB 32 equivalent reduction. The 26 percent reduction from BAU 2020 from new projects built in conformance with these proposed thresholds would achieve an aggregate reduction of approximately 1.6 MMT CO<sub>2</sub>e/yr, which is the level of emission reductions from new Bay Area land use sources needed to meet the AB 32 goals, per ARB's Scoping Plan as discussed above.

Projects with greenhouse gas emissions in conformance with these proposed thresholds would therefore not be considered significant for purposes of CEQA. Although the emissions from such projects would add an incremental amount to the overall greenhouse gas emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a "cumulatively considerable" contribution under CEQA. Such projects would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process.

California's response to the problem of global climate change is to reduce greenhouse gas emissions to 1990 levels by 2020 under AB 32 as a near-term measure and ultimately to 80 percent below 1990 levels by 2050 as the long-term solution to stabilizing greenhouse gas concentrations in the atmosphere at a level that will not cause unacceptable climate change impacts. To implement this solution, the Air Resources Board has adopted a Scoping Plan and budgeted emissions reductions that will be needed from all sectors of society in order to reach the interim 2020 target.

The land-use sector in the Bay Area needs to achieve aggregate emission reductions of approximately 1.6 MMT CO<sub>2</sub>e/yr from new projects between now and 2020 to achieve this goal, as noted above, and each individual new project will need to achieve its own respective portion of this amount in order for the Bay Area land use sector as a whole to achieve its allocated emissions target. Building all of the new projects expected in the Bay Area between now and 2020 in accordance with the thresholds that District staff are proposing will achieve the overall appropriate share for the land use sector, and building each individual project in accordance with the proposed thresholds will achieve that individual project's respective portion of the emission reductions needed to implement the AB 32 solution. For these reasons, projects built in conformance with the proposed thresholds will be part of the solution to the cumulative problem, and not part of the continuing problem. They will allow the Bay Area's land use sector to achieve the emission reductions necessary from that sector for California to implement its solution to the cumulative problem of global climate change. As such, even though such projects

will add an incremental amount of greenhouse gas emissions, their incremental contribution will be less than “cumulatively considerable” because they are helping to achieve the cumulative solution, not hindering it. Such projects will therefore not be “significant” for purposes of CEQA. (*See* CEQA Guidelines §15064(h)(1).)

The conclusion that land use projects that comply with these proposed thresholds is also supported by CEQA Guidelines Section 15030(a)(3), which provides that a project’s contribution to a cumulative problem can be less than cumulatively considerable “if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.” In the case of greenhouse gas emissions associated with land use projects, achieving the amount of emission reductions below BAU that will be required to achieve the AB 32 goals is the project’s “fair share” of the overall emission reductions needed under ARB’s scoping plan to reach the overall statewide AB 32 emissions levels for 2020. If a project is designed to implement greenhouse gas mitigation measures that achieve a level of reductions consistent with what is required from all new land use projects to achieve the land use sector “budget” – *i.e.*, keeping overall project emissions below 1,100 MT CO<sub>2</sub>e/yr or ensuring that project efficiency is better than 4.6 MT CO<sub>2</sub>e/service population – then it will be implementing its share of the mitigation measures necessary to alleviate the cumulative impact, as shown in the analyses set forth above.

It is also worth noting that this “fair share” approach is flexible and will allow a project’s significance to be determined by how well it is designed from a greenhouse gas efficiency standpoint, and not just by the project’s size. For example, a large high-density infill project located in an urban core nearby to public transit and other alternative transportation options, and built using state-of-the-art energy efficiency methods and improvements such as solar panels, as well as all other feasible mitigation measures, would not become significant for greenhouse gas purposes (and thus require a Statement of Overriding Considerations in order to be approved) simply because it happened to be a large project. Projects such as this hypothetical development with low greenhouse gas emissions per service population are what California will need in the future in order to do its part in achieving a solution to the problem of global climate change. The determination of significance under CEQA should therefore take these factors into account, and staff’s proposed significance thresholds would achieve this important policy goal. In all, land use sector projects that comply with the GHG thresholds would not be “cumulatively considerable” because they would be helping to solve the cumulative problem as a part of the AB 32 process.

Likewise, new Air District permit applications for stationary sources that comply with the quantitative threshold of 10,000 MT CO<sub>2</sub>e/yr would not be “cumulatively considerable” because they also would not hinder the state’s ability to solve the cumulative greenhouse gas emissions problem pursuant to AB 32. Unlike the land use sector, the AB 32 Scoping Plan measures, including the cap-and-trade program, provide for necessary emissions reductions from the stationary source sector to achieve AB 32 2020 goals.

While stationary source projects will need to comply with the cap-and-trade program once it is enacted and reduce their emissions accordingly, the program will be phased in over time starting in 2012 and at first will only apply to the very largest sources of GHG emissions. In the mean time, certain stationary source projects, particularly those with large GHG emissions, still will have a cumulatively considerable impact on climate change. The 10,000 MT CO<sub>2</sub>e/yr threshold will capture 95 percent of the stationary source sector GHG emissions in the Bay Area. The five percent of emissions that are from stationary source projects below the 10,000 MT CO<sub>2</sub>e/yr threshold account for a small portion of the Bay Area's total GHG emissions from stationary sources and these emissions come from very small projects. Such small stationary source projects will not significantly add to the global problem of climate change, and they will not hinder the Bay Area's ability to reach the AB 32 goal in any significant way, even when considered cumulatively. In Air District's staff's judgment, the potential environmental benefits from requiring EIRs and mitigation for these projects would be insignificant. In all, based on staff's expertise, stationary source projects with emissions below 10,000 MT CO<sub>2</sub>e/yr will not provide a cumulatively considerable contribution to the cumulative impact of climate change.

### **3 COMMUNITY RISK AND HAZARD THRESHOLDS**

To address community risk from air toxics, the Air District initiated the Community Air Risk Evaluation (CARE) program in 2004 to identify locations with high levels of risk from ambient toxic air contaminants (TAC) co-located with sensitive populations and use the information to help focus mitigation measures. Through the CARE program, the Air District developed an inventory of TAC emissions for 2005 and compiled demographic and health indicator data. According to the findings of the CARE Program, diesel PM—mostly from on and off-road mobile sources—accounts for over 80 percent of the inhalation cancer risk from TACs in the Bay Area (BAAQMD 2006).

The Air District applied a regional air quality model using the 2005 emission inventory data to estimate excess cancer risk from ambient concentrations of important TAC species, including diesel PM, 1,3-butadiene, benzene, formaldehyde and acetaldehyde. The highest cancer risk levels from ambient TAC in the Bay Area tend to occur in the core urban areas, along major roadways and adjacent to freeways and port activity. Cancer risks in areas along these major freeways are estimated to range from 200 to over 500 excess cases in a million for a lifetime of exposure. Priority communities within the Bay Area – defined as having higher emitting sources, highest air concentrations, and nearby low income and sensitive populations – include the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose.

Fifty percent of BAAQMD's population was estimated to have an ambient background inhalation cancer risk of less than 500 cases in one million, based on emission levels in 2005. Table 8 presents a summary of percentages of the population exposed to varying levels of cancer risk from ambient TACs. Approximately two percent of the SFBAAB

population is exposed to background risk levels of less than 200 excess cases in one million. This is in contrast to the upper percentile ranges where eight percent of the SFBAAB population is exposed to background risk levels of greater than 1,000 excess cases per one million. To identify and reduce risks from TAC, this chapter presents thresholds of significance for both cancer risk and non-cancer health hazards.

Percentage of Population (Percent below level of ambient risk)	Ambient Cancer Risk (inhalation cancer cases in one million)
92	1,000
90	900
83	800
77	700
63	600
50	500
32	400
13	300
2	200
<1	100

Source: Data compiled by EDAW 2009.

Many scientific studies have linked fine particulate matter and traffic-related air pollution to respiratory illness (Hiltermann et al. 1997, Schikowski et al 2005, Vineis et al. 2007) and premature mortality (Dockery 1993, Pope et al. 1995, Jerrett et al. 2005). Traffic-related air pollution is a complex mix of chemical compounds (Schauer et al. 2006), often spatially correlated with other stressors, such as noise and poverty (Wheeler and Ben-Shlomo 2005). While such correlations can be difficult to disentangle, strong evidence for adverse health effects of fine particulate matter (PM<sub>2.5</sub>) has been developed for regulatory applications in a study by the U.S, EPA. This study found that a 10 percent increase in PM<sub>2.5</sub> concentrations increased the non-injury death rate by 10 percent (U.S. EPA 2006).

Public Health Officers for four counties in the San Francisco Bay Area in 2009 provided testimony to the Air District’s Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health). Among the recommendations made, was that PM<sub>2.5</sub>, in addition to TACs, be considered in assessments of community-scale impacts of air pollution. In consideration of the scientific studies and recommendations by the Bay Area Health Directors, it is apparent that, in addition to the significance thresholds for local-scale TAC, thresholds of significance are required for near-source, local-scale concentrations of PM<sub>2.5</sub>.

### 3.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Proposed thresholds of significance and Board-requested options are presented in this section:

- The **Staff Proposal** includes thresholds for cancer risk, non-cancer health hazards, and fine particulate matter.
- **Tiered Thresholds Option** includes tiered thresholds for new sources in impacted communities. Thresholds for receptors and cumulative impacts are the same as the Staff Proposal.

Proposal/Option	Construction-Related	Operational-Related
<b>Project-Level – Individual Project</b>		
<p><b>Risks and Hazards – New Source (All Areas)</b> (Individual Project)</p> <p style="text-align: center;"><u><b>Staff Proposal</b></u></p>	<p>Same as Operational Thresholds*</p>	<p style="text-align: center;">Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of &gt;10.0 in a million Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute) Ambient PM<sub>2.5</sub> increase: &gt; 0.3 µg/m<sup>3</sup> annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p><b>Risks and Hazards – New Receptor (All Areas)</b> (Individual Project)</p> <p style="text-align: center;"><u><b>Staff Proposal</b></u></p>	<p>Same as Operational Thresholds*</p>	<p style="text-align: center;">Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of &gt;10.0 in a million Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute) Ambient PM<sub>2.5</sub> increase: &gt; 0.3 µg/m<sup>3</sup> annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

Proposal/Option	Construction-Related	Operational-Related
<p><b>Risks and Hazards</b> (Individual Project)</p> <p><u><b>Tiered Thresholds Option</b></u></p>	<p>Same as Operational Thresholds*</p>	<p><u><b>Impacted Communities: Siting a New Source</b></u></p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of &gt;5.0 in a million Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute) Ambient PM<sub>2.5</sub> increase: &gt; 0.2 µg/m<sup>3</sup> annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
	<p>Same as Operational Thresholds*</p>	<p><u><b>Impacted Communities: Siting a New Receptor</b></u> <u><b>All Other Areas: Siting a New Source or Receptor</b></u></p> <p>Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of &gt;10.0 in a million Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute) Ambient PM<sub>2.5</sub> increase: &gt; 0.3 µg/m<sup>3</sup> annual average</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>
<p><b>Accidental Release of Acutely Hazardous Air Pollutants</b></p>	<p>None</p>	<p>Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant</p>
<b>Project-Level – Cumulative</b>		
<p><b>Risks and Hazards – New Source (All Areas)</b> (Cumulative Thresholds)</p>	<p>Same as Operational Thresholds*</p>	<p>Compliance with Qualified Community Risk Reduction Plan OR Cancer: &gt; 100 in a million (from all local sources) Non-cancer: &gt; 10.0 Hazard Index (from all local sources) (Chronic) <u>PM<sub>2.5</sub>:</u> &gt; 0.8 µg/m<sup>3</sup> annual average (from all local sources)</p> <p><u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor</p>

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

Proposal/Option	Construction-Related	Operational-Related
<b>Risks and Hazards – New Receptor (All Areas)</b> (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) <u>PM<sub>2.5</sub></u> : > 0.8 µg/m <sup>3</sup> annual average (from all local sources)  <u>Zone of Influence</u> : 1,000-foot radius from fence line of source or receptor
<b>Plan-Level</b>		
<b>Risks and Hazards</b>	None	<ol style="list-style-type: none"> <li>1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas).</li> <li>2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways.</li> </ol>
<b>Accidental Release of Acutely Hazardous Air Pollutants</b>	None	None
<b>Regional Plans (Transportation and Air Quality Plans)</b>		
<b>Risks and Hazards</b>	None	No net increase in toxic air contaminants

\* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

### 3.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

The goal of the proposed thresholds is to ensure that no source creates, or receptor endures, a significant adverse impact from any individual project, and that the total of all nearby directly emitted risk and hazard emissions is also not significantly adverse. The thresholds for local risks and hazards from TAC and PM<sub>2.5</sub> are intended to apply to all sources of emissions, including both permitted stationary sources and on- and off-road mobile sources, such as sources related to construction, busy roadways, or freight movement.

Thresholds for an individual new source are designed to ensure that the source does not contribute to a cumulatively significant impact. Cumulative thresholds for sources recognize that some areas are already near or at levels of significant impact. If within such an area there are receptors, or it can reasonably be foreseen that there will be

receptors, then a cumulative significance threshold sets a level beyond which any additional risk is significant.

For new receptors – sensitive populations or the general public – thresholds of significance are designed to identify levels of contributed risk or hazards from existing local sources that pose a significant risk to the receptors. Single-source thresholds for receptors are provided to recognize that within the area defined there can be variations in risk levels that may be significant. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the area defined by the selected radius. Cumulative thresholds for receptors are designed to account for the effects of all sources within the defined area.

Cumulative thresholds, for both sources and receptors, must consider the size of the source area, defined by a radius from the proposed project. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the modeled risk and, until the radius approaches a regional length scale, the greater the expected modeled risk increment. If the area of impact considered were grown to the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

### **3.3.1 SCIENTIFIC AND REGULATORY JUSTIFICATION**

#### ***Regulatory Framework for TACs***

Prior to 1990, the Clean Air Act required EPA to list air toxics it deemed hazardous and to establish control standards which would restrict concentrations of hazardous air pollutants (HAP) to a level that would prevent any adverse effects “with an ample margin of safety.” By 1990, EPA had regulated only seven such pollutants and it was widely acknowledged by that time that the original Clean Air Act had failed to address toxic air emissions in any meaningful way. As a result, Congress changed the focus of regulation in 1990 from a risk-based approach to technology-based standards. Title III, Section 112(b) of the 1990 Clean Air Act Amendment established this new regulatory approach. Under this framework, prescribed pollution control technologies based upon maximum achievable control technology (MACT) were installed without the a priori estimation of the health or environmental risk associated with each individual source. The law listed 188 HAPs that would be subject to the MACT standards. EPA issued 53 standards for 89 different types of major industrial sources of air toxics and eight categories of smaller sources such as dry cleaners. These requirements took effect between 1996 and 2002. Under the federal Title V Air Operating Permit Program, a facility with the potential to emit 10 tons of any toxic air pollutant, or 25 tons per year of any combination of toxic air pollutants, is defined as a major source HAPs. Title V permits include requirements for these facilities to limit toxic air pollutant emissions.

Several state and local agencies adopted programs to address gaps in EPA’s program prior to the overhaul of the national program in 1990. California’s program to reduce exposure to air toxics was established in 1983 by the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) and the Air Toxics "Hot Spots"

Information and Assessment Act (AB 2588, Connelly 1987). Under AB 1807, ARB and the Office of Environmental Health Hazard Assessment (OEHHA) determines if a substance should be formally identified as a toxic air contaminant (TAC) in California. OEHHA also establishes associated risk factors and safe concentrations of exposure.

AB 1807 was amended in 1993 by AB 2728, which required ARB to identify the 189 federal hazardous air pollutants as TACs. AB 2588 (Connelly, 1987) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

### ***Cancer Risk***

Cancer risk from TACs is typically expressed in numbers of excess cancer cases per million persons exposed over a defined period of exposure, for example, over an assumed 70 year lifetime. The Air District is not aware of any agency that has established an acceptable level of cancer risk for TACs. However, a range of what constitutes a significant increment of cancer risk from any compound has been established by the U.S. EPA. EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility- and community-scale level considers a range of acceptable cancer risks from one in a million to one in ten thousand (100 in a million). The guidance considers an acceptable range of cancer risk increments to be from one in a million to one in ten thousand. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from HAPs by limiting additional risk to a level no higher than the one in ten thousand estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years. This goal is described in the preamble to the benzene National Emissions Standards for Hazardous Air Pollutants (NESHAP) rulemaking (54 Federal Register 38044, September 14, 1989) and is incorporated by Congress for EPA's residual risk program under Clean Air Act section 112(f).

Regulation 2, Rule 5 of the Air District specifies permit requirements for new and modified stationary sources of TAC. The Project Risk Requirement (2-5-302.1) states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project cancer risk exceeds 10.0 in one million.

### ***Hazard Index for Non-cancer Health Effects***

Non-cancer health hazards for chronic and acute diseases are expressed in terms of a hazard index (HI), a ratio of TAC concentration to a reference exposure level (REL), below which no adverse health effects are expected, even for sensitive individuals. As such, OEHHA has defined acceptable concentration levels, and also significant concentration increments, for compounds that pose non-cancer health hazards. If the HI for a compound is less than one, non-cancer chronic and acute health impacts have been determined to be less than significant.

***State and Federal Ambient Air Quality Standards for PM<sub>2.5</sub>***

The Children's Environmental Health Protection Act (Senate Bill 25), passed by the California state legislature in 1999, requires ARB, in consultation with OEHHA, to "review all existing health-based ambient air quality standards to determine whether, based on public health, scientific literature and exposure pattern data, these standards adequately protect the public, including infants and children, with an adequate margin of safety." As a result of the review requirement, in 2002 ARB adopted an annual average California Ambient Air Quality Standard (CAAQS) for PM<sub>2.5</sub> of 12 ug/m<sup>3</sup> that is not to be exceeded (California Code of Regulations, Title 17 § 70200, Table of Standards.) The National Ambient Air Quality Standard (NAAQS) established an annual standard for PM<sub>2.5</sub> (15 ug/m<sup>3</sup>) that is less stringent than the CAAQS, but also set a 24-hour average standard (35 ug/m<sup>3</sup>), which is not included in the CAAQS (Code of Federal Regulations, Title 40, Part 50.7).

***Significant Impact Levels for PM<sub>2.5</sub>***

EPA recently proposed and documented alternative options for PM<sub>2.5</sub> Significant Impact Levels (SILs) (Federal Register 40 CFR Parts 51 and 52, September 21, 2007). The EPA is proposing to facilitate implementation of a PM<sub>2.5</sub> Prevention of Significant Deterioration (PSD) program in areas attaining the PM<sub>2.5</sub> NAAQS by developing PM<sub>2.5</sub> increments, or SILs. These "increments" are maximum increases in ambient PM<sub>2.5</sub> concentrations (PM<sub>2.5</sub> increments) allowed in an area above the baseline concentration.

The SIL is a threshold that would be applied to individual facilities that apply for a permit to emit a regulated pollutant in an area that meets the NAAQS. The State and EPA must determine if emissions from that facility will cause the air quality to worsen. If an individual facility projects an increase in emissions that result in ambient impacts greater than the established SIL, the permit applicant would be required to perform additional analyses to determine if those impacts will be more than the amount of the PSD increment. This analysis would combine the impact of the proposed facility when added to all other sources in the area.

The EPA is proposing such values for PM<sub>2.5</sub> that will be used as screening tools by a major source subject to PSD to determine the subsequent level of analysis and data gathering required for a PSD permit application for emissions of PM<sub>2.5</sub>. The SIL is one element of the EPA program to prevent deterioration in regional air quality and is utilized in the new source review (NSR) process. New source review is required under Section 165 of the Clean Air Act, whereby a permit applicant must demonstrate that emissions from the proposed construction and operation of a facility "will not cause, or contribute to, air pollution in excess of any maximum allowable increase or maximum allowable concentration for any pollutant." The purpose of the SIL is to provide a screening level that triggers further analysis in the permit application process.

For the purpose of NSR, SILs are set for three types of areas: Class I areas where especially clean air is most desirable, including national parks and wilderness areas; Class II areas where there is not expected to be substantial industrial growth; and Class III areas where the highest relative level of industrial development is expected. In Class II

and Class III areas, a PM<sub>2.5</sub> concentration of 0.3, 0.8, and 1 µg/m<sup>3</sup> has been proposed as a SIL. To arrive at the SIL PM<sub>2.5</sub> option of 0.8 µg/m<sup>3</sup>, EPA scaled an established PM<sub>10</sub> SILs of 1.0 µg/m<sup>3</sup> by the ratio of emissions of PM<sub>2.5</sub> to PM<sub>10</sub> using the EPA's 1999 National Emissions Inventory. To arrive at the SIL option of 0.3 µg/m<sup>3</sup>, EPA scaled the PM<sub>10</sub> SIL of 1.0 µg/m<sup>3</sup> by the ratio of the current Federal ambient air quality standards for PM<sub>2.5</sub> and PM<sub>10</sub> (15/50). These options represent what EPA currently considers as a range of appropriate SIL values.

EPA interprets the SIL to be the level of PM<sub>2.5</sub> increment that represents a "significant contribution" to regional non-attainment. While SIL options were not designed to be thresholds for assessing community risk and hazards, they are being considered to protect public health at a regional level by helping an area maintain the NAAQS. Furthermore, since it is the goal of the Air District to achieve and maintain the NAAQS and CAAQS at both regional and local scales, the SILs may be reasonably be considered as thresholds of significance under CEQA for local-scale increments of PM<sub>2.5</sub>.

### ***Roadway Proximity Health Studies***

Several medical research studies have linked near-road pollution exposure to a variety of adverse health outcomes impacting children and adults. Kleinman et al. (2007) studied the potential of roadway particles to aggravate allergic and immune responses in mice. Using mice that were not inherently susceptible, the researchers placed these mice at various distances downwind of State Road 60 and Interstate 5 freeways in Los Angeles to test the effect these roadway particles have on their immune system. They found that within five meters of the roadway, there was a significant allergic response and elevated production of specific antibodies. At 150 meters (492 feet) and 500 meters (1,640 feet) downwind of the roadway, these effects were not statistically significant.

Another significant study (Ven Hee et al. 2009) conducted a survey involving 3,827 participants that aimed to determine the effect of residential traffic exposure on two preclinical indicators of heart failure; left ventricular mass index (LVMI), measured by the cardiac magnetic resonance imaging (MRI), and ejection fraction. The studies classified participants based on the distance between their residence and the nearest interstate highway, state or local highway, or major arterial road. Four distance groups were defined: less than 50 meters (165 feet), 50-100 meters, 101-150 meters, and greater than 150 meters. After adjusting for demographics, behavioral, and clinical covariates, the study found that living within 50 meters of a major roadway was associated with a 1.4 g/m<sup>2</sup> higher LVMI than living more than 150 meters from one. This suggests an association between traffic-related air pollution and increased prevalence of a preclinical predictor of heart failure among people living near roadways.

To quantify the roadway concentrations of PM<sub>2.5</sub> that contributed to the health impacts reported by Kleinman et al (2007), the Air District modeled the emissions and associated particulate matter concentrations for the roadways studied. To perform the modeling, emissions were estimated for Los Angeles using the EMFAC model and annual average vehicle traffic data taken from Caltrans was used in the roadway model (CAL3QHCR) to estimate the downwind PM<sub>2.5</sub> concentrations at 50 meters and 150 meters. Additionally,

emissions were assumed to occur from 10:00 a.m. to 2:00 p.m. corresponding to the time in which the mice were exposed during the study. The results of the modeling indicate that at 150 meters, where no significant health effects were found, the downwind concentration of PM<sub>2.5</sub> was 0.78 µg/m<sup>3</sup>, consistent with the proposed EPA SIL option of 0.8 µg/m<sup>3</sup>.

#### ***Concentration-Response Function for PM<sub>2.5</sub>***

The U.S. EPA reevaluated the relative risk of premature death associated with PM<sub>2.5</sub> exposure and developed a new relative risk factor (U.S. EPA 2006). This expert elicitation was prepared in support of the characterization of uncertainty in EPA's benefits analyses associated with reductions in exposure to particulate matter pollution. As recommended by the National Academy of Sciences, EPA used expert judgment to better describe the uncertainties inherent in their benefits analysis. Twelve experts participated in the study and provided not just a point estimate of the health effects of PM<sub>2.5</sub>, but a probability distribution representing the range where they expected the true effect would be. Among the experts who directly incorporated their views on the likelihood of a causal relationship into their distributions, the central (median) estimates of the percent change in all-cause mortality in the adult U.S. population that would result from a permanent 1 µg/m<sup>3</sup> drop in annual average PM<sub>2.5</sub> concentrations ranged from 0.7 to 1.6 percent. The median of their estimates was 1.0 (% increase per 1 µg/m<sup>3</sup> increase in PM<sub>2.5</sub>), with a 90% confidence interval of 0.3 to 2.0 (medians of their 5<sup>th</sup> and 95<sup>th</sup> percentiles, respectively) (BAAQMD 2010). Subsequent to the EPA elicitation, Schwartz et al. (2008) examined the linearity of the concentration-response function of PM<sub>2.5</sub>-mortality and showed that the response function was linear, with health effects clearly continuing below the current U.S. standard of 15 µg/m<sup>3</sup>, and that the effects of changes in exposure on mortality were seen within two years.

#### ***San Francisco Ordinance on Roadway Proximity Health Effects***

In 2008, the City and County of San Francisco adopted an ordinance (San Francisco Health Code, Article 38 - Air Quality Assessment and Ventilation Requirement for Urban Infill Residential Development, Ord. 281-08, File No. 080934, December 5, 2008) requiring that public agencies in San Francisco take regulatory action to prevent future air quality health impacts from new sensitive uses proposed near busy roadways (SFDPH 2008). The regulation requires that developers screen sensitive use projects for proximity to traffic and calculate the concentration of PM<sub>2.5</sub> from traffic sources where traffic volumes suggest a potential hazard. If modeled levels of traffic-attributable PM<sub>2.5</sub> at a project site exceed an action level (currently set at 0.2 µg/m<sup>3</sup>) developers would be required to incorporate ventilation systems to remove 80 percent of PM<sub>2.5</sub> from outdoor air. The regulation does not place any requirements on proposed sensitive uses if modeled air pollutant levels fall below the action threshold. This ordinance only considers impacts from on-road motor vehicles, not impacts related to construction equipment or stationary sources.

A report with supporting documentation for the ordinance (SFPHD 2008) provided a threshold to trigger action or mitigation of 0.2 µg/m<sup>3</sup> of PM<sub>2.5</sub> annual average exposure from roadway vehicles within a 150 meter (492 feet) maximum radius of a sensitive

receptor. The report applied the concentration-response function from Jerrett et al. (2005) that attributed 14 percent increase in mortality to a  $10 \mu\text{g}/\text{m}^3$  increase in  $\text{PM}_{2.5}$  to estimate an increase in non-injury mortality in San Francisco of about 21 excess deaths per million population per year from a  $0.2 \mu\text{g}/\text{m}^3$  increment of annual average  $\text{PM}_{2.5}$ .

### ***Distance for Significant Impact***

The distance used for the radius around the project boundary should reflect the zone or area over which sources may have a significant influence. For cumulative thresholds, for both sources and receptors, this distance also determines the size of the source area, defined. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the risk and the greater the expected modeled risk increment. If the area of impact considered were grown to approach the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

A summary of research findings in ARB's Land Use Compatibility Handbook (ARB 2005) indicates that traffic-related pollutants were higher than regional levels within approximately 1,000 feet downwind and that differences in health-related effects (such as asthma, bronchitis, reduced lung function, and increased medical visits) could be attributed in part to the proximity to heavy vehicle and truck traffic within 300 to 1,000 feet of receptors. In the same summary report, ARB recommended avoiding siting sensitive land uses within 1,000 feet of a distribution center and major rail yard, which supports the use of a 1,000 feet evaluation distance in case such sources may be relevant to a particular project setting. A 1,000 foot zone of influence is also supported by Health & Safety Code §42301.6 (Notice for Possible Source Near School).

Some studies have shown that the concentrations of particulate matter tend to be reduced substantially or can even be indistinguishable from upwind background concentrations at a distance 1,000 feet downwind from sources such as freeways or large distribution centers. Zhu et al. (2002) conducted a systematic ultrafine particle study near Interstate 710, one of the busiest freeways in the Los Angeles Basin. Particle number concentration and size distribution were measured as a function of distances upwind and downwind of the I-710 freeway. Approximately 25 percent of the 12,180 vehicles per hour are heavy duty diesel trucks based on video counts conducted as part of the research. Measurements were taken at 13 feet, 23 feet, 55 feet, 252 feet, 449 feet, and 941 feet downwind and 613 feet upwind from the edge of the freeway. The particle number and supporting measurements of carbon monoxide and black carbon decreased exponentially and all constituents simultaneously tracked with each other as one moves away from the freeway. Ultrafine particle size distribution changed markedly and its number concentrations dropped dramatically with increasing distance. The study found that ultrafine particle concentrations measured 941 feet downwind of I-710 were indistinguishable from the upwind background concentration.

### ***Impacted Communities***

Starting in 2006, the Air District's CARE program developed gridded TAC emissions inventories and compiled demographic information that were used to identify

communities that were particularly impacted by toxic air pollution for the purposes of distributing grant and incentive funding. In 2009, the District completed regional modeling of TAC on a one kilometer by one kilometer grid system. This modeling was used to estimate cancer risk and TAC population exposures for the entire District. The information derived from the modeling was then used to update and refine the identification of impacted communities. One kilometer modeling yielded estimates of annual concentrations of five key compounds – diesel particulate matter, benzene, 1,3-butadiene, formaldehyde, and acetaldehyde – for year 2005. These concentrations were multiplied by their respective unit cancer risk factors, as established by OEHHA, to estimate the expected excess cancer risk per million people from these compounds.

Sensitive populations from the 2000 U.S. Census database were identified as youth (under 18) and seniors (over 64) and mapped to the same one kilometer grid used for the toxics modeling. Excess cancers from TAC exposure were determined by multiplying these sensitive populations by the model-estimated excess risk to establish a data set representing sensitive populations with high TAC exposures. TAC emissions (year 2005) were mapped to the one kilometer grid and also scaled by their unit cancer risk factor to provide a data set representing source regions for TAC emissions. Block-group level household income data from the U.S. Census database were used to identify block groups with family incomes where more than 40 percent of the population was below 185 percent of the federal poverty level (FPL). Poverty-level polygons that intersect high (top 50 percent) exposure cells and are within one grid cell of a high emissions cell (top 25 percent) were used to identify impacted areas. Boundaries were constructed along major roads or highways that encompass nearby high emission cells and low income areas. This method identified the following six areas as priority communities: (1) portions of the City of Concord; (2) Western Contra Costa County (including portions of the Cities of Richmond and San Pablo); (3) Western Alameda County along the Interstate-880 corridor (including portions of the Cities of Berkeley, Oakland, San Leandro, San Lorenzo, Hayward; (4) Portions of the City of San Jose. (5) Eastern San Mateo County (including portions of the Cities of Redwood City and East Palo Alto); and (6) Eastern portions of the City of San Francisco.

### **3.3.2 CONSTRUCTION, LAND USE AND STATIONARY SOURCE RISK AND HAZARD THRESHOLDS**

The proposed options for local risk and hazards thresholds of significance are based on U.S. EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. The thresholds consider reviews of recent health effects studies that link increased concentrations of fine particulate matter to increased mortality. The proposed thresholds would apply to both siting new sources and siting new receptors.

For new sources of TACs, thresholds of significance for a single source are designed to ensure that emissions do not raise the risk of cancer or non-cancer health impacts to cumulatively significant levels. For new sources of PM<sub>2.5</sub>, thresholds are designed to ensure that PM<sub>2.5</sub> concentrations are maintained below state and federal standards in all

areas where sensitive receptors or members of the general public live or may foreseeably live, even if at the local- or community-scale where sources of TACs and PM may be nearby.

***Project Radius for Assessing Impacts***

For a project proposing a new source or receptor it is recommended to assess impacts within 1,000 feet, taking into account both its individual and nearby cumulative sources (i.e. proposed project plus existing and foreseeable future projects). Cumulative sources are the combined total risk values of each individual source within the 1,000-foot evaluation zone. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

The 1,000 foot radius is consistent with findings in ARB's Land Use Compatibility Handbook (ARB 2005), the Health & Safety Code §42301.6 (Notice for Possible Source Near School), and studies such as that of Zhu et al (2002) which found that concentrations of particulate matter tend to be reduced substantially at a distance 1,000 feet downwind from sources such as freeways or large distribution centers.

***Qualified Community Risk Reduction Plan***

Within the framework of these thresholds, proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the thresholds below from any source would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

***Increased Cancer Risk to Maximally Exposed Individual (MEI)***

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 10.0 in one million, assuming a 70 year lifetime exposure. Under Board Option 1, within Impacted Communities as defined

through the CARE program, the significance level for cancer would be reduced to 5.0 in one million for new sources.

The 10.0 in one million cancer risk threshold for a single source is supported by EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. It is also the level set by the Project Risk Requirement in the Air District's Regulation 2, Rule 5 new and modified stationary sources of TAC, which states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project risk exceeds a cancer risk of 10.0 in one million.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Tiered Thresholds Option threshold of 5.0 in one million for new sources in an impacted community is that in these areas the cancer risk burden is higher than in other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has many existing TAC sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer TAC sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

#### ***Increased Non-Cancer Risk to MEI***

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic or acute Hazard Index (HI) from any source greater than 1.0. This threshold is unchanged under Tiered Thresholds Option.

A HI less than 1.0 represents a TAC concentration, as determined by OEHHA that is at a health protective level. While some TACs pose non-carcinogenic, chronic and acute health hazards, if the TAC concentrations result in a HI less than one, those concentrations have been determined to be less than significant.

#### ***Increased Ambient Concentration of PM<sub>2.5</sub>***

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of PM<sub>2.5</sub> from any source would result in an average annual increase greater than 0.3 µg/m<sup>3</sup>. Under Tiered Thresholds Option, within Impacted Communities as defined through the CARE program, the significance level for a PM<sub>2.5</sub> increment is 0.2 µg/m<sup>3</sup>.

If one applies the concentration-response of the median of the EPA consensus review (EPA 2005, BAAQMD 2010) and attributes a 1 percent increase in mortality to a  $1 \mu\text{g}/\text{m}^3$  increase in  $\text{PM}_{2.5}$ , one finds an increase in non-injury mortality in the Bay Area of about 20 excess deaths per million per year from a  $0.3 \mu\text{g}/\text{m}^3$  increment of  $\text{PM}_{2.5}$ . This is consistent with the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a  $0.2 \mu\text{g}/\text{m}^3$   $\text{PM}_{2.5}$  increment.

The SFDPH recommended a lower threshold of significance for multiple sources but only considered roadway emissions within a 492 foot radius. This recommendation applies to a single source but considers all types of emissions within 1,000 feet. On balance, the Air District estimates that the SFDPH threshold and this proposed one, in combination with the cumulative threshold for  $\text{PM}_{2.5}$ , will afford similar levels of health protection.

The proposed  $\text{PM}_{2.5}$  threshold represents the lower range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a “significant contribution” to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Tiered Thresholds Option threshold of  $0.2 \mu\text{g}/\text{m}^3$  for new sources in an impacted community is that these areas have higher levels of diesel particulate matter than do other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has many existing  $\text{PM}_{2.5}$  sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer  $\text{PM}_{2.5}$  sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

### **3.3.2.1 ACCIDENTAL RELEASE OF ACUTELY HAZARDOUS AIR EMISSIONS**

The BAAQMD currently recommends, at a minimum, that the lead agency, in consultation with the administering agency of the Risk Management Prevention Program (RMPP), find that any project resulting in receptors being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for a facility has a significant air quality impact. ERPG exposure level 2 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for

up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

Staff proposes continuing with the current threshold for the accidental release of hazardous air pollutants. Staff recommends that agencies consult with the California Emergency Management Agency for the most recent guidelines and regulations for the storage of hazardous materials. Staff proposes that projects using or storing acutely hazardous materials locating near existing receptors, and projects resulting in receptors locating near facilities using or storing acutely hazardous materials be considered significant.

The current Accidental Release/Hazardous Air Emissions threshold of significance could affect all projects, regardless of size, and require mitigation for Accidental Release/Hazardous Air Emissions impacts.

### **3.3.3 CUMULATIVE RISK AND HAZARD THRESHOLDS**

#### ***Qualified Community Risk Reduction Plan***

Proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the following thresholds from the aggregate of cumulative sources would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

#### ***Increased Cancer Risk to Maximally Exposed Individual (MEI)***

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 100.0 in one million.

The significance threshold of 100 in a million increased excess cancer risk would be applied to the cumulative emissions. The 100 in a million threshold is based on EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. In protecting public health with an ample margin of

safety, EPA strives to provide maximum feasible protection against risks to health from hazardous air pollutants (HAPs) by limiting risk to a level no higher than the one in ten thousand (100 in a million) estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years (NESHAP 54 Federal Register 38044, September 14, 1989; CAA section 112(f)). One hundred in a million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on the District's recent regional modeling analysis.

#### ***Increased Non-Cancer Risk to MEI***

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic Hazard Index from any source greater than 10.0.

The Air District has developed an Air Toxics Hot Spots (ATHS) program that provides guidance for implementing the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly, 1987: chaptered in the California Health and Safety Code § 44300, et. al.). The ATHS provides that if the health risks resulting from the facility's emissions exceed significance levels established by the air district, the facility is required to conduct an airborne toxic risk reduction audit and develop a plan to implement measures that will reduce emissions from the facility to a level below the significance level. The Air District has established a non-cancer Hazard Index of ten (10.0) as ATHS mandatory risk reduction levels. The proposed cumulative chronic non-cancer Hazard Index threshold is consistent with the Air District's ATHS program.

#### ***Increased Ambient Concentration of PM<sub>2.5</sub>***

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of PM<sub>2.5</sub> from any source would result in an average annual increase greater than 0.8 µg/m<sup>3</sup>.

If one applies the concentration-response function from the U.S. EPA assessment (U.S. EPA 2006) and attributes a 10 percent increase in mortality to a 10 µg/m<sup>3</sup> increase in PM<sub>2.5</sub>, one finds an increase in non-injury mortality in the Bay Area of about 50 excess deaths per year from a 0.8 µg/m<sup>3</sup> increment of PM<sub>2.5</sub>. This is greater the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a 0.2 µg/m<sup>3</sup> PM<sub>2.5</sub> increment (SFDPH reported 21 excess deaths per year). However, SFDPH only considered roadway emissions within a 492 foot radius. This proposed threshold applies to all types of emissions within 1,000 feet. In modeling applications for proposed projects, a larger radius results in a greater number of sources considered and higher modeled concentrations. On balance, the Air District estimates that the SFDPH threshold and this proposed one, in combination with the individual source threshold for PM<sub>2.5</sub>, will afford similar levels of health protection.

The proposed cumulative PM<sub>2.5</sub> threshold represents the middle range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a "significant contribution" to regional non-attainment. While this threshold was not designed to be a threshold for assessing

community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison. Furthermore, the  $0.8 \mu\text{g}/\text{m}^3$  threshold is consistent with studies (Kleinman et al 2007) that examined the potential health impacts of roadway particles.

### **3.3.4 PLAN-LEVEL RISK AND HAZARD THRESHOLDS**

Staff proposes plan-level thresholds that will encourage a programmatic approach to addressing the overall adverse conditions resulting from risks and hazards that many Bay Area communities experience. By designating overlay zones in land use plans, local land use jurisdictions can take preemptive action before project-level review to reduce the potential for significant exposures to risk and hazard emissions. While this will require more up-front work at the general plan level, in the long-run this approach is a more feasible approach consistent with Air District and CARB guidance about siting sources and sensitive receptors that is more effective than project by project consideration of effects that often has more limited mitigation opportunities. This approach would also promote more robust cumulative consideration of effects of both existing and future development for the plan-level CEQA analysis as well as subsequent project-level analysis.

For local plans to have a less-than-significant impact with respect to potential risks and hazards, overlay zones would have to be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid risk impacts should be reflected in local plan policies, land use map(s), and implementing ordinances (e.g., zoning ordinance). The overlay zones around existing and future risk sources would be delineated using the quantitative approaches described above for project-level review and the resultant risk buffers would be included in the General Plan (or the EIR for the General Plan) to assist in site planning. BAAQMD will provide guidance as to the methods used to establish the TAC buffers and what standards to be applied for acceptable exposure level in the updated CEQA Guidelines document. Special overlay zones of at least 500 feet (or an appropriate distance determined by modeling and approved by the Air District) on each side of all freeways and high volume roadways would be included in this proposed threshold.

The threshold of significance for plan impacts could affect all plan adoptions and amendments and require mitigation for a plan's air quality impacts. Where sensitive receptors would be exposed above the acceptable exposure level, the plan impacts would be considered significant and mitigation would be required to be imposed either at the plan level (through policy) or at the project level (through project level requirements).

### **3.3.5 COMMUNITY RISK REDUCTION PLANS**

The goal of a Community Risk Reduction Plan would be to bring TAC and  $\text{PM}_{2.5}$  concentrations for the entire community covered by the Plan down to acceptable levels as identified by the local jurisdiction and approved by the Air District. This approach

provides local agencies a proactive alternative to addressing communities with high levels of risk on a project-by-project approach. This approach is supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." This approach is also further supported by CEQA Guidelines Section 15064(h)(3), which provides that a project's contribution to a cumulative effect is not considerable "if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."

***Qualified Community Risk Reduction Plans***

- (A) A qualified Community Risk Reduction Plan adopted by a local jurisdiction should include, at a minimum, the following elements. The District's revised CEQA Guidelines provides the methodology to determine if a Community Risk Reduction Plan meets these requirements. Define a planning area;
- (B) Include base year and future year emissions inventories of TACs and PM<sub>2.5</sub>;
- (C) Include Air District-approved risk modeling of current and future risks;
- (D) Establish risk and exposure reduction goals and targets for the community in consultation with Air District staff;
- (E) Identify feasible, quantifiable, and verifiable measures to reduce emissions and exposures;
- (F) Include procedures for monitoring and updating the inventory, modeling and reduction measures in coordination with Air District staff;
- (G) Be adopted in a public process following environmental review.

## 4 CRITERIA POLLUTANT THRESHOLDS

### 4.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Project Construction	
Pollutant	Average Daily (pounds/day)
ROG (reactive organic gases)	54
NO <sub>x</sub> (nitrogen oxides)	54
PM <sub>10</sub> (exhaust) (particulate matter-10 microns)	82
PM <sub>2.5</sub> (exhaust) (particulate matter-2.5 microns)	54
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best Management Practices
Local CO (carbon monoxide)	None

Project Operations		
Pollutant	Average Daily (pounds/day)	Maximum Annual (tons/year)
ROG	54	10
NO <sub>x</sub>	54	10
PM <sub>10</sub>	82	15
PM <sub>2.5</sub>	54	10
Local CO	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

Plans
<ol style="list-style-type: none"> <li>Consistency with Current Air Quality Plan control measures</li> <li>Projected VMT or vehicle trip increase is less than or equal to projected population increase</li> </ol>

Regional Plans (Transportation and Air Quality Plans)
No net increase in emissions of criteria air pollutants and precursors

### 4.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

#### 4.3.1 PROJECT CONSTRUCTION CRITERIA POLLUTANT THRESHOLDS

Staff proposes criteria pollutant construction thresholds that add significance criteria for exhaust emissions to the existing fugitive dust criteria employed by the Air District. While our current Guidelines considered construction exhaust emissions controlled by the overall air quality plan, the implementation of new and more stringent state and federal standards over the past ten years now warrants additional control of this source of emissions.

The average daily criteria air pollutant and precursor emission levels shown above are recommended as the thresholds of significance for construction activity for exhaust emissions. These thresholds represent the levels above which a project's individual emissions would result in a considerable contribution (i.e., significant) to the SFBAAB's existing non-attainment air quality conditions and thus establish a nexus to regional air quality impacts that satisfies CEQA requirements for evidence-based determinations of significant impacts.

For fugitive dust emissions, staff recommends following the current best management practices approach which has been a pragmatic and effective approach to the control of fugitive dust emissions. Studies have demonstrated (Western Regional Air Partnership, U.S.EPA) that the application of best management practices at construction sites have significantly controlled fugitive dust emissions. Individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to more than 90 percent. In the aggregate best management practices will substantially reduce fugitive dust emissions from construction sites. These studies support staff's recommendation that projects implementing construction best management practices will reduce fugitive dust emissions to a less than significant level.

#### **4.3.2 PROJECT OPERATION CRITERIA POLLUTANT THRESHOLDS**

The proposed thresholds for project operations are the average daily and maximum annual criteria air pollutant and precursor levels shown above. These thresholds are based on the federal BAAQMD Offset Requirements to ozone precursors for which the SFBAAB is designated as a non-attainment area which is an appropriate approach to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevention of a regionally cumulative significant impact (e.g. worsened status of non-attainment). Despite non-attainment area for state  $PM_{10}$  and pending nonattainment for federal  $PM_{2.5}$ , the federal NSR Significant Emission Rate annual limits of 15 and 10 tons per year, respectively, are proposed thresholds as BAAQMD has not established an Offset Requirement limit for  $PM_{2.5}$  and the existing limit of 100 tons per year is much less stringent and would not be appropriate in light of our pending nonattainment designation for the federal 24-hour  $PM_{2.5}$  standard. These thresholds represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. The thresholds would be an evaluation of the incremental contribution of a project to a significant cumulative impact. These threshold levels are well-established in terms of existing regulations as promoting review of emissions sources to prevent cumulative deterioration of air quality. Using existing environmental standards in this way to establish CEQA thresholds of significance under Guidelines section 15067.4 is an appropriate and effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other areas of environmental

regulation. (*See Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal. App. 4<sup>th</sup> 98, 111.<sup>4</sup>)

### **4.3.3 LOCAL CARBON MONOXIDE THRESHOLDS**

The proposed carbon monoxide thresholds are based solely on ambient concentration limits set by the California Clean Air Act for Carbon Monoxide and Appendix G of the State of California CEQA Guidelines.

Since the ambient air quality standards are health-based (i.e., protective of public health), there is substantial evidence (i.e., health studies that the standards are based on) in support of their use as CEQA significance thresholds. The use of the ambient standard would relate directly to the CEQA checklist question. By not using a proxy standard, there would be a definitive bright line about what is or is not a significant impact and that line would be set using a health-based level.

The CAAQS of 20.0 ppm and 9 ppm for 1-hour and 8-hour CO, respectively, would be used as the thresholds of significance for localized concentrations of CO. Carbon monoxide is a directly emitted pollutant with primarily localized adverse effects when concentrations exceed the health based standards established by the California Air Resources Board (ARB).

In addition, Appendix G of the State of California CEQA Guidelines includes the checklist question: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Answering yes to this question would indicate that the project would result in a significant impact under CEQA. The use of the ambient standard would relate directly to this checklist question.

### **4.3.4 PLAN-LEVEL CRITERIA POLLUTANT THRESHOLDS**

This proposed threshold achieves the same goals as the Air District's current approach while alleviating the existing analytical difficulties and the inconsistency of comparing a plan update with AQP growth projections that may be up to several years old. Eliminating the analytical inconsistency provides better nexus and proportionality for evaluating air quality impacts for plans.

Over the years staff has received comments on the difficulties inherent in the current approach regarding the consistency tests for population and VMT growth. First, the population growth estimates used in the most recent AQP can be up to several years older than growth estimates used in a recent plan update, creating an inconsistency in this analysis. Staff recommends that this test of consistency be eliminated because the Air

---

<sup>4</sup> The Court of Appeal in the *Communities for a Better Environment* case held that existing regulatory standards could not be used as a definitive determination of whether a project would be significant under CEQA where there is substantial evidence to the contrary. Staff's proposed thresholds would not do that. The thresholds are levels at which a project's emissions would normally be significant, but would not be binding on a lead agency if there is contrary evidence in the record.

District and local jurisdictions all use regional population growth estimates that are disaggregated to local cities and counties. In addition, the impact to air quality is not necessarily growth but where that growth is located. The second test, rate of increase in vehicle use compared to growth rate, will determine if planned growth will impact air quality. Compact infill development inherently has less vehicle travel and more transit opportunities than suburban sprawl.

Second, the consistency test of comparing the rate of increase in VMT to the rate of increase in population has been problematic at times for practitioners because VMT is not always available with the project analysis. Staff recommends that either the rate of increase in VMT or vehicle trips be compared to the rate of increase in population. Staff also recommends that the growth estimates used in this analysis be for the years covered by the plan. Staff also recommends that the growth estimates be obtained from the Association of Bay Area Governments since the Air District uses ABAG growth estimates for air quality planning purposes.

#### **4.3.5 CRITERIA POLLUTANT THRESHOLDS FOR REGIONAL PLANS**

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District.

The Regional Transportation Plan (RTP), also called a Metropolitan Transportation Plan (MTP) or Long-Range Transportation Plan is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) to conduct long-range (minimum of 20 years) planning in their regions. MTC functions as both the regional transportation planning agency, a state designation, and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of comprehensive transportation system that includes mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The performance of this system affects such public policy concerns as air quality, environmental resource consumption, social equity, "smart growth," economic development, safety, and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process requires developing strategies for operating, managing, maintaining, and financing the area's transportation system in such a way as to advance the area's long-term goals.

The Air District periodically prepares and updates plans to achieve the goal of healthy air. Typically, a plan will analyze emissions inventories (estimates of current and future emissions from industry, motor vehicles, and other sources) and combine that information with air monitoring data (used to assess progress in improving air quality) and computer modeling simulations to test future strategies to reduce emissions in order to achieve air quality standards. Air quality plans usually include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources. Bay Area air quality plans are prepared with the cooperation of MTC and the Association of Bay Area Governments (ABAG).

The proposed threshold of significance for regional plans is no net increase in emissions including criteria pollutant emissions. This threshold serves to answer the State CEQA Guidelines Appendix G sample question: “Would the project Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?”

## 5 ODOR THRESHOLDS

### 5.2 PROPOSED THRESHOLDS OF SIGNIFICANCE

Project Operations – Source or Receptor	Plans
Five confirmed complaints per year averaged over three years	Identify the location, and include policies to reduce the impacts, of existing or planned sources of odors

### 5.3 JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

Staff proposes revising the current CEQA significance threshold for odors to be consistent with the Air District’s regulation governing odor nuisances (Regulation 7—Odorous Substances). The current approach includes assessing the number of unconfirmed complaints which are not considered indicative of actual odor impacts. Basing the threshold on an average of five confirmed complaints per year over a three year period reflects the most stringent standards derived from the Air District rule and is therefore considered an appropriate approach to a CEQA evaluation of odor impacts.

Odors are generally considered a nuisance, but can result in a public health concern. Some land uses that are needed to provide services to the population of an area can result in offensive odors, such as filling portable propane tanks or recycling center operations. When a proposed project includes the siting of sensitive receptors in proximity to an existing odor source, or when siting a new source of potential odors, the following qualitative evaluation should be performed.

When determining whether potential for odor impacts exists, it is recommended that Lead Agencies consider the following factors and make a determination based on evidence in each qualitative analysis category:

- ▶ **Distance:** Use the screening-level distances in Table 9.
- ▶ **Wind Direction:** Consider whether sensitive receptors are located upwind or downwind from the source for the most of the year. If odor occurrences associated

with the source are seasonal in nature, consider whether sensitive receptors are located downwind during the season in which odor emissions occur.

- ▶ **Complaint History:** Consider whether there is a history of complaints associated with the source. If there is no complaint history associated with a particular source (perhaps because sensitive receptors do not already exist in proximity to the source), consider complaint-history associated with other similar sources in BAAQMD’s jurisdiction with potential to emit the same or similar types of odorous chemicals or compounds, or that accommodate similar types of processes.
- ▶ **Character of Source:** Consider the character of the odor source, for example, the type of odor events according to duration of exposure or averaging time (e.g., continuous release, frequent release events, or infrequent events).
- ▶ **Exposure:** Consider whether the project would result in the exposure of a substantial number of people to odorous emissions.

<b>Table 9 – Screening Distances for Potential Odor Sources</b>	
<b>Type of Operation Project Screening</b>	<b>Distance</b>
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Coffee Roaster	1 mile

California Integrated Waste Management Board (CIWMB). Facilities that are regulated by the CIWMB (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a Lead Agency’s discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CIWMB regulated facilities with an adopted OIMP.

## REFERENCES

- ARB. *See* California Air Resources Board.
- BAAQMD. *See* Bay Area Air Quality Management District.
- Bay Area Air Quality Management District. 1999 (December). *BAAQMD CEQA Guidelines*. San Francisco, CA.
- \_\_\_\_\_. 2005. Regulation 2, Rule 2. New Source Review. Available: <<http://www.baaqmd.gov/dst/regulations/rg0202.pdf>>. Accessed February 2009.
- \_\_\_\_\_. 2006. CARE Phase 1 Findings and Policy Recommendations. Available: <[http://baaqmd.gov/CARE/documents/care\\_p1\\_findings\\_recommendations\\_v2.pdf](http://baaqmd.gov/CARE/documents/care_p1_findings_recommendations_v2.pdf)>. Accessed March 2009.
- \_\_\_\_\_. 2008. Source Inventory of Bay Area Greenhouse Gas Emissions. San Francisco, CA.
- \_\_\_\_\_. 2009. *Revised Draft Options and Justifications Report – California Environmental Quality Act Thresholds of Significance* (<http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Revised%20Draft%20CEQA%20Thresholds%20%20Justification%20Report%20Oct%202009.ashx>)
- \_\_\_\_\_. 2010. *Draft 2010 CAP Appendix A – Bay Area Air Pollution Burden: Past & Present* San Francisco, CA
- California Air Pollution Control Officers Association. 2008 (January). *CEQA and Climate Change*. Sacramento, CA. Available: <<http://www.capcoa.org/CEQA/CAPCOA%20White%20Paper.pdf>>. Accessed April 10, 2009.
- California Air Resources Board. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Stationary Source Division. Mobile Source Control Division. October.
- \_\_\_\_\_. 2002. Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates. Available: <http://www.arb.ca.gov/research/aaqs/std-rs/pm-final/pm-final.htm>.
- \_\_\_\_\_. 2005. *Land Use Compatibility Handbook. A Community Health Perspective*. Sacramento, CA.
- \_\_\_\_\_. 2008a. *Climate Change Proposed Scoping Plan*. Sacramento, CA. Adopted in December 2008 Available: <<http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>>. Accessed March 2009.

\_\_\_\_\_. *Climate Change Proposed Scoping Plan*. Sacramento, CA. Adopted in December 2008 Available:  
<<http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>>.  
Accessed March 2009.

\_\_\_\_\_. 2009a. Greenhouse Gas Inventory and Forecast. Available:  
<[http://www.arb.ca.gov/cc/inventory/data/tables/arb\\_ghg\\_inventory\\_forecast\\_2008\\_06\\_26.xls](http://www.arb.ca.gov/cc/inventory/data/tables/arb_ghg_inventory_forecast_2008_06_26.xls)>. Accessed March 2009.

\_\_\_\_\_. 2009b. *Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*. Available:  
<<http://www.arb.ca.gov/cc/localgov/ceqa/meetings/10270prelimdraftproposal102408.pdf>>. Accessed March 2009.

\_\_\_\_\_. 2009c. *Area Designations and Maps*. Available:  
<<http://www.arb.ca.gov/desig/desig.htm>>, Accessed April 10.

\_\_\_\_\_. 2009d. Proposed Regulation to Implement the Low Carbon Fuel Standard, Staff Report Initial Statement Reasons. March 5. Available:  
<http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>. Accessed, August 20, 2009.

CEC. *See* California Energy Commission.

CEC. 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings. Available:  
<[http://www.energy.ca.gov/title22008standards/rulemaking/documents/2007-11-07\\_IMPACT\\_ANALYSIS.PDF](http://www.energy.ca.gov/title22008standards/rulemaking/documents/2007-11-07_IMPACT_ANALYSIS.PDF)>. Accessed March 2009.

California Department of Finance. 2009. Residential Development Data: E5 – City and County Population Estimates. 2000-2050 - Race and Ethnic Populations Totals. Available: <<http://www.labormarketinfo.edd.ca.gov/?pageid=145>>. Accessed February 2009.

California Economic Development Department. 2009. Commercial/Industrial Employment Data: Projections of Employment by Industry and Occupation. Available: <<http://www.labormarketinfo.edd.ca.gov/?pageid=145>>. Accessed February 2009.

City and County of San Francisco Department of Public Health. 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review. Program on Health, Equity, & Sustainability. Occupational & Environmental Health Section. Prepared by Rajiv Bhatia and Thomas Rivard. May 6.

Dockery D. 1993. An association between air pollution and mortality in six U.S. cities. *N Engl J Med* 329:1753–1759.

EPA. *See* U.S. Environmental Protection Agency.

Governor's Office of Planning and Research. 2008 (June 19). *Technical Advisory: CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*. Sacramento, CA. Available: <<http://opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>>. Accessed February 2009.

Hiltermann T, Bruijne Cd, Stolk J, Zwinderman A, Spijksma F, Roemer W, et al. 1997. Effects of photochemical air pollution and allergen exposure on upper respiratory tract inflammation in asthmatics. *Am J Respir Crit Care Med* 156(6):1765–1772.

Intergovernmental Panel on Climate Change. 2007a (February). *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC*. Geneva, Switzerland.

\_\_\_\_\_. 2007a (February). *Climate Change 2007: Climate Change 2007: Synthesis Report Summary for Policymakers*. Geneva, Switzerland.

IPCC. *See* Intergovernmental Panel on Climate Change.

Jerrett M et al. 2005. Spatial Analysis of Air Pollution and Mortality in Los Angeles. *Epidemiology*. 16: 727-736

Kleinman, M.T., Sioutas, C., Froines, J.R., Fanning, E., Hamade, A., Mendez, L., Meacher, D., Oldham, M. Inhalation of Concentrated Ambient Particulate Matter Near a Heavily Trafficked Road Simulates Antigen-Induced Airway Responses in Mice; *Inhal. Toxicol.* 2007, 19 (Supp. 1), 117-126.

Laden, F.; Schwartz, J.; Speizer, F.E.; Dockery, D.W. Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-Up of the Harvard Six Cities Study. *Am. J. Respir. Crit. Care Med.* (2006), 173, 667-672.

OPR. *See* Governor's Office of Planning and Research.

Pope C III, Thun M, Namboodiri M, Dockery D, Evans J, Speizer F. 1995. Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults. *Am J Respir Crit Care Med* 151(3):669–6

Rimpo and Associates. 2009. BAAQMD CEQA Projects Database. Orangevale, CA.

- Schauer JJ, Lough GC, Schafer MM, Christensen WF, Arndt MF, DeMinter JT, et al. 2006. Characterization of metals emitted from motor vehicles. *Res Rep Health Eff Inst* 133:1–7.
- Schikowski T, Sugiri D, Ranft U, Gehring U, Heinrich J, Wichmann E, et al. 2005. Long-term air pollution exposure and living close to busy roads are associated with COPD in women. *Respir Res* 6(1):152.
- Schwartz, J.; Coull, B.; Laden, F.; Ryan, L. The Effect of Dose and Timing of Dose on the Association between Airborne Particles and Survival. *Env Health Persp* (2008) 116, 1: 64-69.
- SFDPH. See City and County of San Francisco Department of Public Health.
- UNFCCC. See United Nations Framework Convention on Climate Change.
- United Nations Framework Convention on Climate Change. 2009. *Article 1 of the UNFCCC*. Available: [http://unfccc.int/essential\\_background/convention/background/items/2536.php](http://unfccc.int/essential_background/convention/background/items/2536.php). Accessed April 8, 2009.
- U.S. Environmental Protection Agency. 2008. Federal Register: Implementation of the New Source Review (NSR) Program for Particulate Matter (PM<sub>2.5</sub>) less than 2.5 Micrometers. Available: <<http://www.epa.gov/fedrgstr/EPA-AIR/200May/Day-1a10768.pdf>>. Accessed February 2009.
- \_\_\_\_\_. 2009. Monitor Values Report Data. Available: <<http://www.epa.gov/air/data/index.html>>. Accessed April 8, 2009.
- \_\_\_\_\_. 2006. *Expanded Expert Judgment Assessment of the Concentration-Response Relationship between PM<sub>2.5</sub> Exposure and Mortality*, prepared for OAQPS-EPA by Industrial Economics Inc., September 21, 2006. A summary of this study is provided in Roman, HA et al., *Environ. Sci. Tech.* 2008, 42, 2268-2274.
- \_\_\_\_\_. 1988. C. Cowherd, et al., *Control of Open Fugitive Dust Sources*, EPA-450/3-88-008, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1988.
- Van Hee, V.C., Adar, S.D., Szpiro, A.A., Barr, R.G., Bluemke, D.A., Diez Roux, A.V., Gill, E.A., Sheppard, L., Kaufman, J.D. Exposure to Traffic and Left Ventricular Mass and Function; *Am. J. Respir. Crit. Care Med.* 2009, 179 (9), 827-834.
- Vineis P, Hoek G, Krzyzanowski M, Vigna-Taglianti F, Veglia F, Airolidi L, et al. 2007. Lung cancers attributable to environmental tobacco smoke and air pollution in non-smokers in different European countries: a prospective study. *Environ Health* 6:7; doi:10.1186/1476-069X-6-7 [Online 15 February 2007]

Bay Area AQMD Proposed Air Quality CEQA Thresholds of Significance  
May 3, 2010

Western Regional Air Partnership. 2006. *WRAP Fugitive Dust Handbook*. September 7, 2006. Available:  
[http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook\\_Rev\\_06.pdf](http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf).  
Accessed September 2009.

Zhu, Y. Hinds, W.C., Kim S, and Sioutas, C. 2002. Concentration and size distribution of ultrafine particles near a major highway. *Journal of Air and Waste Management Association*. 2002 Sep; 52 (9): 1032-42.

**Proposed Air Quality CEQA Thresholds of Significance  
(May 3, 2010)**

Pollutant	Construction-Related	Operational-Related	
<b>Project-Level</b>			
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub> (exhaust)	82	82	15
PM <sub>2.5</sub> (exhaust)	54	54	10
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
<b>GHGs Projects other than Stationary Sources</b>	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO <sub>2</sub> e/yr OR 4.6 MT CO <sub>2</sub> e/SP/yr (residents + employees)	
<b>GHGs Stationary Sources</b>	None	10,000 MT/yr	
<b>Risks and Hazards – New Source (Individual Project)</b>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase: > 0.3 µg/m <sup>3</sup> annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	
<b>Risks and Hazards – New Receptor (Individual Project)</b>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase: > 0.3 µg/m <sup>3</sup> annual average <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	
<b>Risks and Hazards – New Source (Cumulative Thresholds)</b>	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM <sub>2.5</sub> : > 0.8 µg/m <sup>3</sup> annual average (from all local sources) <u>Zone of Influence:</u> 1,000-foot radius from fence line of source or receptor	

**Proposed Air Quality CEQA Thresholds of Significance  
(May 3, 2010)**

<b>Pollutant</b>	<b>Construction-Related</b>	<b>Operational-Related</b>
<b>Risks and Hazards – New Receptor</b> (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) PM <sub>2.5</sub> : > 0.8 µg/m <sup>3</sup> annual average (from all local sources)  <u>Zone of Influence</u> : 1,000-foot radius from fence line of source or receptor
<b>Accidental Release of Acutely Hazardous Air Pollutants</b>	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
<b>Odors</b>	None	Complaint History—5 confirmed complaints per year averaged over three years
<b>Plan-Level</b>		
<b>Criteria Air Pollutants and Precursors</b>	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
<b>GHGs</b>	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO <sub>2</sub> e/ SP/yr (residents + employees)
<b>Risks and Hazards</b>	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
<b>Odors</b>	None	Identify locations of odor sources in general plan
<b>Accidental Release of Acutely Hazardous Air Pollutants</b>	None	None
<b>Regional Plans (Transportation and Air Quality Plans)</b>		
<b>GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants</b>	None	No net increase in emissions
Notes: CO = carbon monoxide; CO <sub>2</sub> e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO <sub>x</sub> = oxides of nitrogen; PM <sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM <sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SP = service population; tpy = tons per year; yr= year.		
* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.		

ATTACHMENT 3

Written Comments Received After January 6, 2010 with Staff Responses

# INDEPENDENT ENERGY PRODUCERS

---

April 16, 2010

Gregory Tholen, Principal Environmental Planner  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco CA 94109

Re: Comments of the Independent Energy Producers Association on the District's Draft  
CEQA Guidelines

2010-1-1

Dear Mr. Tholen:

The Independent Energy Producers Association (IEP), California's oldest and leading trade association representing the interests of developers and operators of independent energy facilities and power marketers, is pleased to submit comments on the Bay Area Air Quality Management District's (District) Draft CEQA Guidelines (Draft Guidelines). The IEP's members include producers of renewable products derived from biomass, geothermal, small hydro, solar, and wind; producers of highly efficient cogeneration; and owners/operators of gas-fired merchant facilities. IEP has been closely following development of guidelines by various State and local agencies throughout California concerning evaluation of the environmental impacts from greenhouse gas (GHG) emissions associated with stationary facilities.

IEP requests that the Draft Guidelines be amended to address the unique issues raised by GHG emissions related to electric generating facilities. GHG emissions from energy facilities should be analyzed under CEQA in the context of California's electricity system as a whole. This system-wide approach to analysis of the GHG impacts from new electric generating facilities under CEQA was recently adopted by the State Energy Resources and Conservation Development Commission (Energy Commission or Commission) in its recent "precedent decision"<sup>1</sup> concerning the Avenal Energy Project (Avenal). In Avenal, the Energy Commission concluded that given the "unique nature of how power plants operate in an integrated system . . . the GHG emissions from a power plant's operation should be assessed not by inaccurately treating the plant as a standalone facility operating in a vacuum, but rather in the context of the operation of the entire electricity system of which the plant is an integrated part."<sup>2</sup>

---

<sup>1</sup> A "precedent decision" is one issued by the Energy Commission pursuant to Government Code § 11425.60(b), which authorizes an agency to designate a determination as precedential if it "contains a significant legal or policy determination of general application that is likely to recur."

<sup>2</sup> California Energy Commission, Final Commission Decision, at 104, 99, CEC-800-2009-006-CMF, Dec. 2009.

## *The Avenal Decision*

In the Avenal Decision, a copy of which is enclosed, the Energy Commission analyzed the GHG emissions of the proposed natural gas-fired power plant in the context of the entire electric system, and found that the construction and operation of the plant would *reduce* overall GHG emissions from the electricity system.<sup>3</sup> This conclusion is premised upon the fact that the electricity system operates pursuant to the “loading order” agreed to by the Commission and the California Public Utilities Commission (CPUC) and the practical realities governing dispatch of generating facilities by the California Independent System Operator (CAISO). The Avenal Decision reaches the following two key findings:

- “Because the system is integrated, and because electricity is produced and consumed instantaneously, and will be unless and until large-scale electricity storage technologies are available, any change in demand and, most important for this analysis, any change in output from any generation source, is likely to affect the output from all generators.”<sup>4</sup>
- “Because operating cost is correlated with heat rate (the amount of fuel that it takes to generate a unit of electricity), and, in turn, heat rate is directly correlated with emissions (including GHG emissions), *when one power plant runs, it usually will take the place of another facility with higher emissions that otherwise would have operated.*”<sup>5</sup>

In light of these findings, the Energy Commission concluded that the power generated by the proposed Avenal Energy Project “will probably displace power from two types of power plants that are less-efficient (and therefore higher-GHG-emitting): coal-fired power plants that are unable to sell to California utilities under the SB 1368 [Emissions Performance Standard (EPS)], and power plants that must be retired because they currently use once-through cooling.”<sup>6</sup> Further, the Commission rejected arguments that, for purposes of CEQA, there must be evidence showing that less efficient plants would actually be decommissioned as a result of a new plant’s approval to demonstrate a system-wide reduction in GHG emissions and the goals of AB 32.<sup>7</sup>

The Avenal Decision further concludes that the addition of the proposed Avenal Energy Project to the electric system would foster the integration of intermittent solar and wind generation, thereby generating further reductions in system-wide GHG emissions.<sup>8</sup> In reaching this finding, the Commission rejected arguments that new fossil-fueled generating capacity would result in an increase in demand or other “growth-inducing” impacts or would “crowd out” the construction

---

<sup>3</sup> *Id.*, at 113, Finding of Fact no. 18.

<sup>4</sup> *Id.*, at 103, citing to the Energy Commission’s *Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities For Greenhouse Gas Impact in Power Plant Siting Applications*, CEC-700-2009-004, March 2009 at pp. 20-22. (A copy of which is attached.)

<sup>5</sup> *Id.*, at 104 (emphasis in original).

<sup>6</sup> *Id.*, at 113, Finding of Fact no. 17.

<sup>7</sup> *Id.*, at 106. (“It is not necessary... that there be evidence ‘showing that aging power plants are decommissioned as a consequence of new power plant approval’ ... in order to conclude that the Avenal Energy Project’s operation will reduce GHG emissions.”) (internal citations omitted).

<sup>8</sup> *Id.*, at 113, Findings of Fact no. 20-22.

of new renewable generation facilities.<sup>9</sup> Instead, the Commission found that the addition of some efficient, dispatchable natural gas-fired generating sources to the existing system will be necessary to meet both the Renewable Portfolio Standard goal of obtaining at least 33 percent of power supplies from renewable sources by the year 2020 and AB 32's goal of reducing state-wide GHG emissions to 1990 levels by 2020.<sup>10</sup>

### ***OPR's New CEQA Guidelines Support a System-Wide Approach***

The Energy Commission's approach in the Avenal Decision is consistent with the CEQA Guidelines concerning GHG emissions that were recently approved by the Office of Planning and Research and the Resources Agency. New CEQA Guideline section 15056.4(b)(1) states that agencies should consider "The extent to which the project may increase or reduce greenhouse gas emissions *as compared to the existing environmental setting*" (emphasis added.) In the context of power plants, the "existing environmental setting" is the existing mix of generation going to the grid, which currently includes older sources of electricity. Older facilities produce higher levels of GHGs than newer facilities. The Resource Agency's Final Statement of Reasons for the new CEQA Guidelines in fact specifies that a system-wide analysis is appropriate for electric generation sources: "In the context of power generation, to the extent that a project may cause changes in greenhouse gas emissions in an existing power *system*, and substantial evidence substantiates such changes, those changes may be considered pursuant to section 15064.4(b)(1)."<sup>11</sup> The District's Guidelines should adopt the same approach.

### ***The District Has Itself Acknowledged the Precedent-Setting Nature of the Avenal Approach***

In its own permitting programs, the District has recently acknowledged the precedent-setting nature of the Energy Commission's Avenal decision in analyzing the impacts attributable to a new power plant. In the District's Responses to Comments concerning the Federal "Prevention of Significant Deterioration" (PSD) Permit for the Russell City Energy Center the District expressly relied upon the Avenal Decision to respond to comments criticizing a statement appearing in the District's Associated Growth analysis, which suggested that power from this new, highly efficient gas-fired power plant would displace power from older, less efficient generating sources.<sup>12</sup> Additionally, in the District's February 24, 2010 Status Report on Proposed Bay Area Power Plants to Chairperson Uilkema and Members of the Stationary Source Committee, the District further noted the significance of the CEC's analytical framework for assessing the GHG impacts of new power plants:

---

<sup>9</sup> *Id.*, at 107, 110, and 113, Finding of Fact no. 22 ("The Avenal Energy Project will not have a growth-inducing impact.").

<sup>10</sup> *Id.*, at 113, Finding of Fact no. 23.

<sup>11</sup> Resource Agency's Final Statement of Reasons, page 81.

<sup>12</sup> See Responses to Public Comments, Federal "Prevention of Significant Deterioration" Permit, Russell City Energy Center, Application No. 15487, February 2010, at 229. Specifically, in the District's Response to Comment XIX-14, it observed:

Moreover, the Air District also notes that the [Energy Commission] recently decided that, because of the unique nature of how power plants are dispatched as part of an integrated system, the greenhouse gas emissions from a proposed power plant should be assessed on a system-wide basis for the purposes of CEQA." *Id.*

The CEC, in their role as lead agency under their CEQA-equivalent review process, has begun to review GHG emissions from new power plant projects for consistency with California's stringent GHG goals and policies. This review has been in the context of the operation of the entire electricity system of which the proposed plant is an integrated part. Because the system is integrated, and because electricity is produced and consumed instantaneously, any change in output from one generation source is likely to affect the output from all generators. The CEC has noted that the electricity produced from a new plant will most likely displace the output from older, less energy efficient, fossil-fueled plants, thereby reducing the GHG emissions that would otherwise occur. The CEC also indicates that, even as more renewable generation is introduced into the system to meet GHG emission reduction goals, gas-fired power plants will be necessary to provide intermittent generation support, extreme load and system emergencies support, as well as meeting local capacity requirements. At this time, gas-fired plants are better able to provide such services than are most renewables, because they can be dispatched when they are needed.<sup>13</sup>

While it is clear that each of the large power plants discussed in the District's recent Status Report on Proposed Bay Area Power Plants will be subject to the Energy Commission's jurisdiction and therefore undergo a CEQA-equivalent analysis following the Avenal approach, IEP strongly believes that the District's Guidelines should make clear that the same system-wide approach should also apply to the assessment of GHG impacts from electric generating facilities which are not subject to the Energy Commission's jurisdiction. To that end, IEP would strongly urge the District revise the draft Guidelines to make clear that the stand-alone threshold proposed for new stationary sources is not intended to apply to new generating sources connected to the grid, which should instead be evaluated pursuant to a system-wide approach, as in the Energy Commission's precedent decision of Avenal .

### ***There Should Be Uniformity of Approach In Assessing the GHG Emissions from Power Plants***

The Energy Commission is the lead state agency with authority over the siting and certification of thermal power plants with a generation capacity of more than 50 MW under state law. The Commission's precedent decision in Avenal should be persuasive authority for the District as it formulates its own guidelines for assessing the GHG impacts from the same types of facilities. Uniformity of treatment under the law is at issue. Power plants that are less than 50 MW in capacity should not be subject to a stand-alone GHG assessment under the District's Guidelines when power plants of more 50 MW are subject to a system-wide approach. Indeed, it certainly would be an odd result if the District's application of a 10,000 tpy CO<sub>2</sub>e significance threshold to any new power plant that was not subject to the Energy Commission's jurisdiction should cause developers to propose larger projects than might be appropriate or necessary, just so they could benefit from the Energy Commission's Avenal approach and avoid an inaccurate stand-alone analysis of their GHG impacts by either the District or another lead agency under the District's Draft Guidelines. The Avenal decision should be a precedent for the District as well.

---

<sup>13</sup> Memorandum, from Jack P. Broadbent, Executive Officer/APCO to Chairperson Uilkema and Members of the Stationary Source Committee, February 24, 2010, Re: Status Report on Proposed Bay Area Power Plants, Agenda no. 5 (hereinafter, Status Report on Proposed Bay Area Power Plants), at 2.

*IEP Looks Forward to Participating in the Guideline Development Process*

Given the unique nature of electric generating facilities, facilities which are dispatched as part of an integrated system, the District's Draft Guidelines should clarify that, for the purposes of CEQA, GHG emissions from a proposed electric generating facility should be assessed on a system-wide basis, in the context of the operation of the entire electricity system of which the facility is in integrated part.

2010-1-1

This amendment will not only provide for a comprehensive analysis of GHG emissions from electric generating facilities, it will also ensure consistency among the District's approvals, and consistency with the Energy Commission's policies and approvals. Absent this amendment, the District could be in a position of assessing GHG impacts related to the same electric generating facility differently than the Energy Commission. It is good public policy to maintain uniformity among agency policies on key issues.

IEP is happy to meet with District representatives to discuss its request and looks forward to actively participating in all future hearings and workshops concerning the District's efforts to adopt new CEQA Guidelines.

Very truly yours,



Jan Smutny-Jones  
Executive Director

cc: Alexander Crockett, Esq., Assistant Counsel, BAAQMD

Enclosure

Comment Letter #: 2010-1

Date: April 16, 2010

From: Jan Smutny-Jones, Executive Director, Independent Energy Producers

---

Response to Comments:

2010-1-1 The commenter recommends that the CEQA Guidelines to specify that GHG emissions from a proposed electric generating facility be assessed on a system-wide basis, in the context of the entire electricity system of which the facility is an integrated part, rather than being analyzed as a stand-alone facility.

The Air District's proposed Guidelines are intended to serve as general guidance and cannot prescribe a methodological approach for every type of project or situation. While the District agrees that GHG emissions are most appropriately analyzed in most cases as cumulative impacts, the Guidelines cannot suggest that lead agencies never need to consider project-specific impacts if substantial evidence suggests such an impact.

The District disagrees that the Guidelines would restrict a lead agency to only consider a project's environmental impacts in a vacuum. Indeed, the District recognizes the value of the Avenal decision and advises that lead agencies consider such an analysis. Further, nothing in the District's guidelines would preclude a system-wide approach. When determining significance, a lead agency is required to consider a project's incremental contribution together with the contributions of other past, present, and reasonably foreseeable probable future projects. In either a project-specific or cumulative impact analysis, a lead agency would consider the extent to which a project increases or decreases emissions compared to the existing environmental setting. The "setting" to be described varies depending on the project and the potential environmental resources that it may affect. The manner in which a lead agency defines the environmental setting is to be construed as broadly as possible to ensure the fullest protection to the environment. In the context of power generation, to the extent that a project may cause changes in GHG emissions in an existing power system, and substantial evidence substantiates such changes, those changes may be considered.

Similar to the State CEQA Guidelines, the lead agency has the discretion to choose the most appropriate method of analysis in the context and circumstances surrounding the project. Lead agencies are encouraged to tailor a project's air quality impact analysis to meet the needs of the local community and to conduct more refined analysis where fitting, beyond the recommendations in the CEQA Guidelines. Staff recognizes that the CEQA Guidelines may not apply to every type of land use project and a lead agency must use its judgment in applying the guidelines to a given situation. Staff believes that it is in a lead agency's discretion to

determine whether GHG emissions from a proposed electricity generating facility, one that does not fall into the California Energy Commission's (CEC) jurisdiction, be assessed on a system-wide versus stand-alone basis. A lead agency may choose to apply the CEC Avenal approach to its facility if fitting. In this case, staff recommends for the lead agency to justify its determination with substantial evidence.

BAAQMD strongly encourages lead agencies to consult with the District whenever necessary. If a lead agency is unsure of how to apply the guidance to a particular situation, the agency should seek input from District staff.



ASSOCIATION OF  
ENVIRONMENTAL  
PROFESSIONALS

RECEIVED

10 MAY 24 AM 10:52

BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

May 10, 2010

Bay Area Air Quality Management District  
Attention: Gregory Tholen  
939 Ellis Street  
San Francisco, CA 94109

**RE: Bay Area Air Quality Management District's "California Environmental Quality Act Draft Air Quality Guidelines"**

Dear Mr. Tholen,

On behalf of the Association of Environmental Professionals (AEP or "Association"), I appreciate this opportunity to provide comments on the Bay Area Air Quality Management District's (District) "California Environmental Quality Act Air Quality Guidelines" dated December 2009 ("CEQA Guide"). As we understand it, the purpose of the CEQA Guide is to assist lead agencies in evaluating air quality impacts in the Bay Area pursuant to CEQA.

AEP is a non-profit organization of environmental professionals founded in 1974 primarily in response to the enactment of CEQA. Today, AEP members are involved in every aspect of CEQA review. AEP members represent a broad cross section of professionals working for public agencies, consulting firms, research institutions, non-governmental organizations, and project applicants. AEP is therefore very appreciative of the District's interest in providing guidance to others for the analysis of air quality impacts in the Bay Area pursuant to CEQA.

The AEP submitted comments November 11, 2009, but to our knowledge did not receive a response to those comments. Some of AEP's comments were addressed in the subsequent version of the CEQA Guide. However, the comments that were not addressed are identified below. AEP respectfully requests the District's careful consideration of the following issues raised by the CEQA Guide.

**1. CEQA Guide is Broader than other Conventional "CEQA Guidelines"  
(Comment in November 11, 2009 Letter)**

The District's CEQA Guide includes useful information on the interpretation and application of CEQA with regard to air quality impacts. The "CEQA Guide" also includes subject matter beyond CEQA guidance, including design standards (e.g., for siting a "new receptor" in an "impacted community," even though such projects may not be subject to CEQA), urban planning concepts

2010-2-1



c/o Lynne C. Bynder, CMP  
Phone 760.799.2740

Meetings Xceptional  
Fax 760.674.2479

AEP MANAGEMENT OFFICE

40747 Baranda Court

Palm Desert, CA 92260

Email LBynder@meetingsxceptional.com

www.califaep.org

(e.g, the proposal to introduce the concept of "Community Risk Reduction Plans"), and standards for thresholds of significance for greenhouse gas emissions, it would seem incomplete to title the document "CEQA Air Quality Guidelines."

The District's CEQA Guide, in fact, bares little resemblance to *State CEQA Guidelines*.

AEP appreciates the District's efforts to integrate multiple strategies to protect public health and the environment from air pollution and the effects of climate change. AEP is nevertheless concerned that, by virtue of the title, the public could misconstrue all elements of the CEQA Guide as an extension of the State CEQA Guidelines. AEP believes that the public would be better served if the report were to be reorganized in a manner that more clearly distinguishes between explicit CEQA guidance, District advice concerning project design and siting principles, the concept of Community Risk Reduction Plans, and standards for thresholds of significance. In our view, it would be more accurate to refer to this document as a "handbook for local government consideration of air quality impacts, greenhouse gas emissions, and airborne community health risks reduction."

2010-2-1  
cont.

**2. The Concept of Community Risk Reduction Plans Needs Amplification  
(Comment in November 11, 2009 Letter)**

The concept of a Community Risk Reduction Plan as a means of dealing with toxic air contaminants is an appealing idea that deserves further amplification in the CEQA Guide. It would be helpful if the CEQA Guide included recommendations regarding adoption and certification of such plans, consistency with the District's air quality plans as well as local general plans, enforcement mechanisms, jurisdictional considerations (e.g., when a community at risk extends across more than one local governmental jurisdiction), etc.

2010-2-2

**3. Air Quality Plan Consistency  
(Comment in November 11, 2009 Letter)**

It would be helpful if the CEQA Guide contained recommendations on how projects would address the State CEQA Guidelines Appendix G Checklist question, "Would the project conflict with or obstruct implementation of the applicable air quality plan?" The CEQA Guide contains recommendations for proposed plans but not for individual projects.

2010-2-3

The Bay Area is currently in nonattainment for PM<sub>10</sub>, PM<sub>2.5</sub>, and ozone. Therefore, if the project's emissions are under the significance thresholds for ozone precursors (volatile organic compounds and nitrogen oxides), PM<sub>10</sub>, and PM<sub>2.5</sub>, could it follow that the project would be consistent with the applicable air quality plan? It is infeasible to utilize the methodology recommended for proposed plans for projects as it is not possible to compare the vehicle miles traveled assumed in an air quality plan to the proposed vehicle miles traveled for a project.



**4. Other Greenhouse Gases  
(New Comment)**

Page 4-5 of the CEQA Guide states, "BAAQMD recommends using URBEMIS to estimate direct CO<sub>2</sub> emissions from construction, area and mobile sources. GHG [greenhouse gas] emissions may not be included in all the categories discussed earlier..." The statement could be considered inconsistent with the CEQA Guideline Amendments, which indicates that a greenhouse gas, "includes but is not limited to: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride" (Section 15364.5). To evaluate all direct and indirect sources of emissions, the additional greenhouse gas species should also be included in the assessment.

2010-2-4

**5. References  
(New Comment)**

Please provide full references for the various documents referred to in the CEQA Guide. For example, on Page 5-7 there is no reference for the document, "Recommended Methods for Screening and Modeling Local Risks and Hazards."

2010-2-5

Thank you again for the opportunity to provide comments on the CEQA Guide.

Sincerely,



Gene Talmadge  
AEP President



Comment Letter #: 2010-2

Date: May 24, 2010

From: Gene Talmadge, President, Association of Environmental Professionals

---

Response to Comments:

- 2010-2-1 Staff disagrees that the title of the CEQA Guidelines should be changed to better reflect the multiple strategies contained in the document. The purpose of the CEQA Guidelines is to assist local governments in analyzing air quality impacts in environmental reviews. In today's environment, significant air quality impacts may be generated from criteria pollutants and ozone precursors, greenhouse gases, and toxic air pollutants. We believe it is appropriate for the CEQA Guidelines to assist local governments on these issues; and in fact, the decision to include greenhouse gas thresholds and additional community risks and hazards thresholds was in response in part to local governments' expressed need for additional CEQA guidance in these areas.
- 2010-2-2 The updated CEQA Guidelines (May 3, 2010) contains additional guidance on community risk reduction plans (CRRP). In addition staff posted a guidance document for developing CRRPs on the District's website on May 3, 2010. Staff will continue to engage with local jurisdictions and other stakeholders on appropriate elements of CRRP.
- 2010-2-3 The updated CEQA Guidelines (May 3, 2010) contains guidance on how to determine whether a project is consistent with the region's applicable air quality plan (p. 9-2). This guidance is applicable to all projects, including proposed plans and individual development projects.
- 2010-2-4 Staff agrees that all direct and indirect emission sources should be included in a project's analysis. Therefore, staff recommends lead agencies to use the BGM Model in conjunction with data derived from the URBEMIS Model. Furthermore, the State CEQA Guidelines amendments adding Section 15364.5 provides a definition of "greenhouse gases." The specified gases in that section are consistent with existing law as they are defined to include those identified by the Legislature in section 38505(g) of the Health and Safety Code. Similar to the State CEQA Guidelines amendments, so long as substantial evidence indicates that such non-listed gases may result in significant adverse effects, a lead agency would be required to take such effects into consideration.
- 2010-2-5 The CEQA Guidelines provides references for all its various documents either within the text or as footnotes. The reference the commenter is referring to on page 5-7 is a hyperlink to an electronic document on the District's website.