Errata Sheet
Revised Agenda
Board of Directors Meeting
Wednesday, May 4, 2011

The revised agenda reflects the removal of Agenda Item 13 from the Closed Session and the renumbering of the remaining agenda items.

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

REVISED AGENDA
BOARD OF DIRECTORS
REGULAR MEETING

MAY 4, 2011

A meeting of the Bay Area Air Quality Management District Board of Directors will be held at 9:45 a.m. in the 7th Floor Board Room at the Air District Headquarters, 939 Ellis Street, San Francisco, 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, <u>any item</u> may be considered in <u>any order</u>. After action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting.

Public Comment Procedures

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

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

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

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

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

BOARD OF DIRECTORS REGULAR MEETING
REVISED AGENDA

WEDNESDAY **BOARD ROOM**
MAY 4, 2011 **7TH FLOOR**
9:45 A.M.

CALL TO ORDER

Opening Comments — Chairperson, Tom Bates
Roll Call — Clerk of the Boards
Pledge of Allegiance

PUBLIC COMMENT ON NON-AGENDA MATTERS

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

CONSENT CALENDAR (ITEMS 1 – 6)

Staff/Phone (415) 749-

1. Minutes of April 6, 2011
   K. Krow/5073
   kkrow@baaqmd.gov

2. Board Communications Received from April 6, 2011 through May 3, 2011
   J. Broadbent/5052
   jbroadbent@baaqmd.gov

   A list of communications directed to the Board of Directors received by the Air District from April 6, 2011 through May 3, 2011 if any, will be at each Board Member's place.

3. District Personnel on Out-of-State Business Travel
   J. Broadbent/5052
   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. Quarterly Report of California Air Resources Board Representative - Honorable Ken Yeager
   J. Broadbent/5052
   jbroadbent@baaqmd.gov

5. Set Public Hearing to Consider Proposed Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use; and Certification of a CEQA Environmental Impact Report **H. Hilken/4642**
hhilken@baaqmd.gov

The Board of Directors will consider proposed amendments to consider adoption of a new rule, Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use; and consider the certification of a Final Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA).

6. Amend Executive Officer/APCO Employment Agreement **J. Broadbent/5052**
jbroadbent@baaqmd.gov

The Board of Directors will consider approval of the amendment to the Employment Agreement between the Bay Area Air Quality Management District and the Executive Officer/Air Pollution Control Officer.

COMMITTEE REPORTS AND RECOMMENDATIONS

7. Report of the **Executive Committee** Meeting of April 11, 2011
CHAIR: T. BATES **J. Broadbent/5052**
jbroadbent@baaqmd.gov

8. Report of the **Budget and Finance Committee Meeting** of April 28, 2011
CHAIR: C. GROOM **J. Broadbent/5052**
jbroadbent@baaqmd.gov

The Committee may recommend Board of Director's approval of the proposed FYE 2012 Budget.

9. Report of the **Mobile Source Committee** Meeting of May 2, 2011
CHAIR: S. HAGGERTY **J. Broadbent/5052**
jbroadbent@baaqmd.gov

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

A) Consideration of Projects with Proposed Grant Awards Over $100,000:

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

B) Consideration of $20 Million in California Goods Movement Bond (I-Bond) Funding for Bay Area Ports:

1. *Approve the proposed and alternate I-Bond shore power projects;*
2. *Authorize the Executive Officer/APCO to enter into agreements for the proposed projects.*

C) *Consideration of Air District Participation in Lawn and Garden Equipment Replacement Project:*

1. *Adopt a resolution authorizing the Executive Officer/APCO to accept a grant from the California Air Resources Board of up to $182,025 and committing the Air District to comply with the Lawn and Garden Equipment Replacement Project requirements, and allocating up to $182,025 in Mobile Source Incentive Funding as matching funds;*

2. *Authorize the Executive Officer/APCO to execute all necessary agreements with the ARB relating to the Air District's receipt of LEGER project funds for FYE 2011.*

D) *Consideration of Transportation Fund for Clean Air (TFCA) County Program Manager, Expenditure Plans for Fiscal Year Ending (FYE) 2012, and Allocation of Remaining FYE 2008 Funds*

1. *Approve the allocation of FYE 2012 TFCA County Program Manager Funds listed on Table 1;*

2. *Authorize the Executive Officer/APCO to enter into funding agreements with the County Program Managers for the total funds to be programmed in FYE 2012, listed on Table 1, consistent with the Board adopted TFCA Program Manager Fund Policies;*

3. *Approve the allocation of $68,020.50 in remaining FYE 2008 funds to the Napa County Transportation and Planning Agency, and authorize the Executive Officer/APCO to amend the funding agreement with the agency to include the additional allocation.*

PUBLIC HEARING(S)

10. Public Hearing to Consider Adoption of Proposed Amendments to Air District Regulation 3: Fees, and Approval of Notice of Exemption from California Environmental Quality Act (CEQA)

B. Bateman/4653
bbateman@baaqmd.gov

The Board of Directors will hold a Public Hearing to: (1) Consider Adoption of Proposed Amendments to District Regulation 3: Fees, with the exception of proposed amendments to Fee Schedules L, Q, R, and S (for which a second public hearing is required prior to adoption), (2) Receive Testimony on Proposed Amendments to Fee Schedules L, Q, R, and S, and (3) Consider Approval of a Notice of Exemption from CEQA. The Board of Directors will also hold a Public Hearing on June 15, 2011, to (1): Consider Adoption of Proposed Amendments to Fee Schedules L, Q, R, and S in District Regulation 3: Fees; and to (2) Consider Approval of a Notice of Exemption from CEQA.

11. Public Hearing to Consider Adoption of Proposed Amendments to Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and to Regulation 1: General Provisions and Definitions; and to Consider Approval of an Addendum to the 2008 CEQA Negative Declaration for Regulation 9-7

H. Hilken/4642
hhilken@baaqmd.gov

The Board of Directors will hold a Public Hearing to: (1) Consider Adoption of Proposed Amendments to Regulation 9; Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters; and to Regulation 1: General Provisions and Definitions; and to (2) Consider Approval of an Addendum to the 2008 California Environmental Quality Act (CEQA) Negative Declaration. The proposed amendments to Regulation 9-7 will revise compliance dates for certain devices subject to the rule. The proposed amendments to Regulation 1 are administrative, regarding registration of non-permitted equipment.

PRESENTATION

12. Legal Framework for the Air District – How Do We Clean the Air?

B. Bunger/4797
bbunger@baaqmd.gov

The Board of Directors will discuss the legal framework in which the Air District operates and the legal authorities granted and obligations imposed by that framework.

CLOSED SESSION

13. **Conference with Labor Negotiators *(Government Code § 54957.6(a))***

Agency Negotiators: *Jack P. Broadbent, Executive Officer/APCO*
Jack M. Colbourn, Director of Administrative Services

Employee Organization: Bay Area Air Quality Employee's Association, Inc.

OPEN SESSION

PUBLIC COMMENT ON NON-AGENDA MATTERS

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3
Speakers who did not have the opportunity to address the Board in the first round of comments on non-agenda matters will be allowed three minutes each to address the Board on non-agenda matters.

BOARD MEMBERS' COMMENTS

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

OTHER BUSINESS

14. Report of the Executive Officer/APCO

15. Chairperson's Report

16. Time and Place of Next Meeting – 9:45 A.M. Wednesday, May 18, 2011 – 939 Ellis Street, San Francisco, CA 94109

17. Adjournment

CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109

(415) 749-5130
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities. Notification to the Executive Office should be given at least 3 working days prior to the date of the meeting so that arrangements can be made accordingly.
- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the Air District's headquarters at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body. Such writing(s) may also be posted on the Air District's website (www.baaqmd.gov) at that time.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF DISTRICT MEETINGS

APRIL 2011

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Budget & Finance Committee *(At the Call of the Chair)*	**Thursday**	**28**	**10:00 a.m.**	**4th Floor Conf. Room**

MAY 2011

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)*	**Monday**	**2**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**4**	**9:45 a.m.**	**Board Room**
Board of Directors Stationary Source Committee *(At the Call of the Chair)*	**Thursday**	**5**	**9:30 a.m.**	**Board Room**
Board of Directors Legislative Committee *(At the Call of the Chair)*	**Monday**	**9**	**9:30 a.m.**	**4th Floor Conf. Room**
Advisory Council Meeting	**Wednesday**	**11**	**9:00 a.m.**	**Board Room**
Board of Directors Climate Protection Committee *(At the Call of the Chair)*	**Monday**	**16**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**18**	**9:45 a.m.**	**Board Room**
Board of Directors Budget Hearing *(At the Call of the Chair)*	**Wednesday**	**18**	**Immediately following Board Meeting**	**Board Room**
Board of Directors Budget & Finance Committee *(At the Call of the Chair)*	**Wednesday**	**25**	**1:00 p.m.**	**4th Floor Conf. Room**
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)*	**Thursday**	**26**	**9:30 a.m.**	**4th Floor Conf. Room**

JUNE 2011

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**1**	**9:45 a.m.**	**Board Room**
Advisory Council Meeting	**Wednesday**	**8**	**9:00 a.m.**	**Board Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**15**	**9:45 a.m.**	**Board Room**
Board of Directors Budget Hearing *(At the Call of the Chair)*	**Wednesday**	**15**	**Immediately following Board Meeting**	**Board Room**
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)*	**Thursday**	**23**	**9:30 a.m.**	**4th Floor Conf. Room**

JULY 2011

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**6**	**9:45 a.m.**	**Board Room**
Board of Directors Stationary Source Committee *(At the Call of the Chair)*	**Thursday**	**7**	**9:30 a.m.**	**Board Room**
Advisory Council Meeting	**Wednesday**	**13**	**9:00 a.m.**	**Board Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**20**	**9:45 a.m.**	**Board Room**
Board of Directors Mobile Source Committee *(Meets 4th Thursday each Month)*	**Thursday**	**28**	**9:30 a.m.**	**4th Floor Conf. Room**

HL – 4/25/11 (4:50 p.m.)
P/Library/Forms/Calendar/Calendar/Moncal

AGENDA: 1

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 25, 2011

Re: Board of Directors Draft Meeting Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Board of Directors Regular Meeting of April 6, 2011.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Regular Meeting of April 6, 2011.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Kris Perez Krow
Reviewed by: Rex Sanders

AGENDA: 1

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

Board of Directors Regular Meeting
Wednesday, April 6, 2011
9:45 a.m.

DRAFT MINUTES

Call to order: Chairperson Tom Bates called the Regular Meeting to order at 9:48 a.m.

Pledge of Allegiance: Chairperson Bates led the Pledge of Allegiance.

Roll Call:

Present: Chairperson Tom Bates; Secretary Ash Kalra; and Directors Susan Gorin, Carole Groom, Jennifer Hosterman, David Hudson, Carol Klatt, Nate Miley, Mark Ross, James Spering, Gayle B. Uilkema, Brad Wagenknecht, Ken Yeager, and Shirlee Zane. Directors John Avalos, Susan Garner, Liz Kniss, Eric Mar and Johanna Partin arrived after the roll call was taken.

Absent: Vice Chair John Gioia, Directors Harold Brown and Scott Haggerty

CONSENT CALENDAR (Items 1-6):

1. **Minutes of the March 16, 2011 Regular Meeting.**

2. **Board Communications Received from March 16, 2011 through April 5, 2011.**

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

4. **Set Public Hearings to Consider Adoption of Proposed Amendments to District Regulation 3: Fees, and Approval of a Notice of Exemption from CEQA.**

5. **Set Public Hearing for May 4, 2011 to Consider Adoption of Proposed Amendments to Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and to Regulation 1: General Provisions and Definitions; and to Consider Approval of an Addendum to the 2008 CEQA Negative Declaration for Regulation 9-7.**

6. **Set a Public Hearing for May 18, 2011 for the Exclusive Purpose of Considering Testimony on the Air District's Proposed Budget for FYE 2012 and a Final Public Hearing of June 15, 2011 to Consider Adoption of the Proposed Budget for FYE 2012.**

Board Action: Director Wagenknecht made a motion to approve Consent Calendar Items 1 through 6; Director Spering seconded the motion; which carried unanimously without objection.

COMMITTEE REPORTS AND RECOMMENDATIONS

7. Report of the Budget and Finance Committee Meeting of March 23, 2011
Chair: C. Groom

Director Groom reported that the Budget & Finance Committee met on Wednesday, March 23, 2011 and approved the minutes of February 23, 2011.

The Committee received the following reports:

A) Summary of 2011 Cost Recovery and Containment Study
B) Fiscal Year Ending (FYE) 2012 Fee Proposal
C) Discussion of Proposed Budget for Fiscal Year 2011/2012

The Committee received a summary of the Cost Recovery study from Gary Golitz of the Matrix Consulting Group. The study calculated the Air District's current Cost Recovery and also evaluated the Air District's efforts on cost containment and recommended methods to enhance existing strategies already implemented. The study determined that 62% of District costs are recovered through fee revenues. The consultant recommended the Board adopt a Cost Recovery Policy to provide guidance in moving towards fuller cost recovery.

The Committee then received a summary of draft amendments to the Air District's Fee Schedule for the upcoming fiscal year. Proposed are increases ranging from 5% to 14%, or an average increase of $50 or less for small businesses and $231 for large facilities. The Committee discussed small business impacts, minimal effects a 5% increase has on total fee recovery, reductions in permit revenue, a comparison of the Air District's fees with the South Coast Air District, and the proposed rule development schedule. The Committee recommended that increases be reflected in dollar costs rather than percentages.

The Committee then received an overview of the proposed Budget for Fiscal Year 2011/2012, reviewed revenue sources and expenditures, and the District's work to take a pro-active, balanced, multi-faceted and multi-year approach in responding with personnel costs, expenditures, fees, and reserves. The Committee reviewed trends of cost cutting and projections on how reduced expenditures would affect Planning, Outreach, Facilities, and Information Systems. The proposed Budget draws down reserves by approximately $900,000. Committee members voiced the need to provide education and outreach on Air District programs.

The next meeting of the Budget and Finance Committee is scheduled for April 28, 2011 at 9:30 a.m.

Board Member Discussion:
Director Zane confirmed that there will be a discussion on the policy issues of cost recovery. Director Groom said that will occur after the Budget and Finance committee analyzes the proposals submitted by the Air District staff. Mr. Broadbent said that discussion is expected at the next Budget and Finance Committee meeting, scheduled for April 28, 2011. Director Spering confirmed with staff that permitting and enforcement were part of the cost recovery report, and complimented staff for the report.

Board Action: Director Groom made a motion to approve the report of the Budget and Finance Committee; Director Ross seconded the motion; which carried unanimously without objection.

8. Report of the Mobile Source Committee Meeting of March 24, 2011
Chair: S. Haggerty

Director Groom reported that the Mobile Source Committee met on Thursday, March 24, 2011 and approved the minutes of January 27, 2011.

The Committee received an informational report on the results of the Vehicle Buyback Program for Calendar Year 2010. The program was suspended on December 31, 2010 and was extremely cost effective, at $9,976 per weighted ton. With $7 million expended, the program resulted in 5,862 eligible vehicles scrapped in 2010. Over 55,000 vehicles have been retired since the program began, resulting in reductions of over 4,600 tons of NOx and over 32 tons of PM.

The Committee discussed Carl Moyer projects with grant awards over $100,000, which included 10 projects to replace 15 pieces of off-road equipment and 8 marine engines, with $1,569,074 in total awards and over 15.2 tons per year of criteria pollutant emissions reductions. The Committee recommends Board of Directors approval of Carl Moyer Program projects with proposed grant awards over $100,000; and authorizes the Executive Officer to enter into agreements for the recommended projects.

The Committee then received an informational report on 2010 fund allocations and a projection of 2011 available grant program funds under the Mobile Source Incentive Fund (MSIF), Carl Moyer Program (CMP), Transportation Fund for Clean Air (TFCA) Regional Fund, and I-Bond.

The Committee discussed both opportunities and challenges of all funding categories and asked that priority be placed on funding the Bicycle Program, Shuttle Program, Shore Power, Agriculture, Electric Vehicles and Clean Fleets for Cities and Counties, and Bus Replacements. The Committee also reviewed California Air Resource Board's (CARB) 2014 deadline and the need for funding future truck retrofits and replacements.

The next meeting of the Mobile Source Committee will be on Thursday, April 28, 2011 at 9:30 a.m.

Board Action: Director Groom made a motion to approve the report and recommendations of the Mobile Source Committee; Director Hosterman seconded the motion; which carried unanimously without objection.

9. Report of the Personnel Committee Meeting of March 28, 2011
Chair: B. Wagenknecht

Director Wagenknecht reported that the Personnel Committee met on Monday, March 28, 2011, without a quorum and deferred approval of the minutes of January 19, 2011 until the next Personnel Committee meeting.

The Committee then held interviews of candidates for two Alternate Hearing Board Member vacancies. The incumbents' terms expire on April 2, 2011. The consensus of the Committee was for the Board of Directors to:

1) Re-appoint incumbent Mr. Peter Chiu, as an Alternate Hearing Board Member, for a three-year term, expiring on April 2, 2014; and
2) Appoint Mr. Michael McGowan, as an Alternate Hearing Board Member, for a three-year term expiring on April 2, 2014.

The Committee adjourned to Closed Session to conduct a performance evaluation of the Executive Officer / APCO, pursuant to Government Code Section 54957 and 54957.6.

The Committee reconvened in Open Session, and the Chair announced that no reportable action had been taken in the Closed Session.

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

Board Action: Director Wagenknecht moved to approve the Personnel Committee's report and consensus proposals of the Personnel committee; Director Hosterman seconded the motion; which carried unanimously without objection.

10. Report of the Public Outreach Committee Meeting of April 4, 2011
Chair: M. Ross

Director Ross reported that the Public Outreach Committee met on Monday, April 4, 2011 and approved the minutes of March 3, 2011.

The Committee received an update on the Smoking Vehicle Program, 1-800 EXHAUST. Last year there were over 10,000 reports of smoking vehicles. This season's campaign will target women ages 18-34, who are likely to report smoking vehicles. The campaign will be featured in San Francisco, San Mateo County, Alameda County and downtown San Jose. These areas have the most smog check failures and the highest number of smoking vehicle reports.

Committee members heard an update on the Dr. Stephen Schneider Climate Leadership Award Program. The first award was given to Dr. Schneider, in memoriam, and was presented to his widow, Dr. Terry Root, at the January 19, 2011 Special Board Meeting / Retreat. The Air District will continue to recognize contributions in climate leadership made by individuals or organizations in the areas of influencing public opinion, problem solving and policy leadership. The Committee also discussed adding awards in the areas of public health and technology.

The 20th Anniversary of the Spare the Air campaign was discussed and plans for the coming year were presented to the Committee. The summertime smog season runs from May 2 through September 30, 2011. This year's campaign will integrate the employer program, resource teams, 1-800-EXHAUST and grants all under the Spare the Air branding.

Because this is the last year we have Congestion Mitigation and Air Quality Improvement (CMAQ) Program funds for the Spare the Air campaign, this may be the last year of a large scale campaign. Staff is looking for additional funding. A new 20th anniversary logo was presented.

The next meeting of the Public Outreach Committee will be scheduled at the Call of the Chair.

Director Ross then called upon Lisa Fasano, Director of Communications and Outreach, who presented slides showing the evolution of the Spare the Air logo, and revealed the new 20th anniversary logo.

Board Member Discussion:
Director Ross mentioned that there is now a billboard on Van Ness Avenue in San Francisco displaying the Air District's new air freshener campaign.

Director Uilkema expressed her desire to keep the "Cloud Guy" mascot, especially for presentations at schools, because "Cloud Guy" is fun and gets children's attention. She would like to have the "Cloud Guy" costume involved in Air District activities.

Director Hosterman inquired about the process after a call to 1-800-EXHAUST is made. Barbara Coler, from the Air District's Enforcement Division, explained that Air District staff takes the information received on the 1-800-EXHAUST voice mail and researches the vehicle license plate through the DMV database; staff then sends out a letter to the vehicle owner explaining the problems with smoking vehicles and suggests that the owner repair the vehicle.

Board Action: Director Ross moved to approve the report of the Public Outreach Committee; Director Hudson seconded the motion; which carried unanimously without objection.

11. Report of the Legislative Committee Meeting of April 4, 2011

Chair: S. Garner

Director Garner reported that the Legislative Committee met on Monday, April 4, 2011 and approved the minutes of March 7, 2011.

The Committee discussed and considered new bills of air quality significance, and recommended Board of Directors' approval of the following five (5) positions on bills:

BILL	AUTHOR	DESCRIPTION	POSITION
AB 470	Halderman	Allows AB 923 funds to retrofit existing school buses	SUPPORT
AB 937	Mendoza	Allows bonnet technology to be used at ports, although this is already allowed under CARB's shore power regulation	OPPOSE
AB 1064	Furutani	Would weaken CARB's shore power regulation	OPPOSE
AB 1256	B. Berryhill	Would require BAAQMD payment for emissions transported to the Central Valley	OPPOSE
SB 758	Fuller	Would reduce tire fee funding to the Carl Moyer program.	OPPOSE

In addition, the Committee also discussed SB 519 (La Malfa). The text was not available for the packet, but was handed out at the meeting. This bill would make it illegal for a technician to look under the hood of a vehicle during a smog check. The Committee's sense was that the Board of Directors should oppose SB 519; however, in order to properly notice and consider that position, the Board will take a formal position at a future meeting.

There were no recent developments to discuss regarding the State budget. The next meeting of the Legislative Committee is at the call of the Chair.

Board Action: Director Garner made a motion to approve the report and recommendations of the Legislative Committee; Director Hosterman seconded the motion; which carried unanimously without objection.

PRESENTATION

12. Overview of the 2010/2011 Particulate Matter (PM) Wood Smoke Season

Mr. Broadbent introduced the three-part presentation summarizing the PM wood smoke season, including statistics about air quality in the Bay Area this winter; how the enforcement of the wood smoke program is working; the outreach efforts; and the direction of the program for next year.

Eric Stevenson, Director of Technical Services, stated his presentation would be an overview of the 2010/2011 Winter Particulate Matter season showing how the wood smoke reduction program was successful in protecting public health of Bay Area residents. The Winter Spare the Air program is critical to attain PM 2.5 air quality standards.

The presentation will include the essential components of the wood smoke program, which are: monitoring and modeling, the enforcement program, compliance assistance, and education and outreach. Program results and future planning will be discussed.

Mr. Stevenson reviewed what PM 2.5 is, and why it is a concern. PM 2.5 is particulate matter that is 2.5 microns or less in size; it is approximately 25 times smaller than the diameter of human hair. It can penetrate deeply into the lungs and cause numerous serious health effects. Wood burning is a significant source of PM 2.5.

Over the last three years, the number of days that recorded an exceedance has decreased, and the number of Winter Spare the Air alerts has also decreased.

Decreased PM is associated with increased rainfall. To see how much we are progressing, we can compare years with similar amounts of rainfall and see the downward trend in PM over time. In addition to rainfall, there are other meteorological conditions that impact PM 2.5 concentrations. When the air is cold, still and dry, there can be PM 2.5 build-up and the potential for exceedance. Even with all the variables accounted for - cool, dry and still - a downward trend can still be seen, and the mandatory wood smoke rule is making a positive difference on PM 2.5. It's important to remember that PM 2.5 is made up of many compounds, but wood smoke is the main component of PM 2.5 in the winter.

Ms. Coler continued with the presentation focusing on compliance and enforcement.
The Board adopted Regulation 6, Rule 3, the Wood Smoke Rule, on July 9, 2008, which:

- Prohibits burning on nights with high PM 2.5 forecast (Winter Spare the Air Season: Nov 1 – Feb 28);
- Limits visible emissions from wood-burning devices;
- Requires cleaner burning technology for sale of new and used devices;
- Requires cleaner burning technology in new construction and remodels;
- Prohibits burning garbage in wood-burning devices; and
- Requires seasoned wood and solid fuel labeling (labeling requirements went into effect this year).

The Air District gives more advanced public notice of Winter Spare the Air alerts with prior day forecasting, and the alerts run 24 hours, from midnight to midnight. This year we started having voluntary no burn alerts to reduce the likelihood of needing to call a Winter Spare the Air alert.

The first time an inspector documents a violation at a residence, the owner will receive a warning letter. The second time an inspector observes a violation at the same residence; the owner will receive a Notice of Violation (NOV) and a $400 penalty. Subsequent violations at the same address, will lead to additional NOVs and penalties, which are progressive. Inspection patrols are active in high burning & high complaint areas. Staff continues to expand multilingual outreach materials and Spare the Air notifications.

The program depends on partnerships; Enforcement staff works hand-in hand with Outreach and Monitoring staff. Partnerships with health care organizations such a Breathe California, Kaiser Permanente and the American Lung Association help to get the health message out to the public. Cities and Counties can adopt their own wood smoke ordinances. Additionally citizens can work with each other to help spread the word in their own neighborhoods.

Ms. Coler went over the enforcement statistics for the last three seasons.

	2008/09	**2009/10**	**2010/11**
WSTA Alerts	11	7	**4**
$PM_{2.5}$ Excesses	13	9	**1**
Complaints	1,500	2,355	**1,373**
WS Direct Mail	1,550	10,270	**592**
Warning Letters	254	310	**59**
NOVs	1	9	**2**
Exemptions	0	44	**49**

Complaints come in either on-line or through the phone system. Inspectors use the complaints to develop patrol routes. Once we receive a complaint about a residence, we send out an informational packet that explains the rule, how to comply and the negative effects of wood smoke. On the four Winter Spare the Air Days this year, inspectors conducted 96 patrols. On a typical Spare the Air Day they observe over 18,000 homes. In August 2009, the Air District developed guidelines for exemptions. Two types of exemptions are considered. A permanent exemption is for homes without any other source of heat, and a seasonal exemption is used for homes where the heater is not operating.

Ms. Coler let the Board know that excess visible emissions (VE) are banned year-round. To reduce VE, burn clean, dry, seasoned wood and not garbage, magazines or other inappropriate materials. Except for the first 20 minutes, VE with over 20% opacity is in violation. Air District inspectors conducted 81 VE patrols on 35 days in the Winter Spare the Air season alone. Documenting VE is difficult. It can be unsafe, visibility can be blocked or sun location can make visibility difficult. An inspector needs 7 continuous minutes of visible emissions to conduct readings.

Lisa Fasano, Director of Communications and Outreach, presented the last part of the report. She stated that wood smoke reduction is as much about public outreach as regulation. We have continued to get the message across about the wood smoke rule and the effects of wood smoke on the public health. One-on-one communications are an important part of the outreach. This year we added outreach in five different languages; ads were translated and ran in areas that have a higher concentration of non-English speaking residents. “Promotion in Motion” or “Craig the Bike Guy”, is another method of outreach that is well received. We placed ads in ice rinks and continued the successful a door-to-door campaign using high school leadership students. Online ads were placed in local and regional news sites.

Ms. Fasano talked about this season's statistics.

- 213,368 Calls to 1-877-4NO-BURN *(representing 210,353 in English; 2,170 in Spanish; 402 Cantonese; 392 Mandarin and 51 in Vietnamese)*
- 102,854 Subscribers to Air Alerts
- 17,636 Subscribers to Phone Alerts
- 676 Total News Stories
- 57.8 Million Total Media Impressions
- ~4,000 Social Media fans & followers

Bay Area residents are responding to the "Check Before You Burn" message. A multi-lingual phone line was added this year. The public remains committed to the Air Alert and Phone Alert systems; there is overwhelming support for the wood-burning rule. 20% of Bay Area households reduced their wood-burning and 59% were aware of media stories about the Winter Spare the Air program. On alert days, 22% were aware that an alert had been issued. Social media helped spread the Air District's message via fans and followers, by people forwarding messages and conversing with their own friends and fans. Survey results about wood burning show an increase in awareness. 59% of those surveyed know that the Air District prohibits wood-burning on alert days and 76% support the wood-burning rule.

We are going to continue to focus on the public health message about wood-burning. It is still a surprise to most people that wood-burning is a health hazard. We need to continue to remember that this is a regional pollutant. We measure and call it on a regional basis. There can be problems in particular neighborhoods. We want to work with local governments to find local solutions. Local government can help get the word out that wood-burning is a serious health concern and residents need to reduce the wood-burning for the benefit of the public as well as their families in their homes. The voluntary alert calls were successful and most likely helped avoid an exceedance on at least one date this year.

Chair Bates opened the public comment period.

Ms. Patti Weisselberg, representing Families for Clean Air, commented that even as the regional PM levels are going down, there are still neighborhoods that are heavily impacted by wood smoke. She felt that the program is not being adequately enforced in those areas. She asked that there be more monitoring and outreach targeted to those neighborhoods. She expressed a concern that some exemptions may have been granted on false pretenses and hoped there would be more follow-up.

Ms. Bev Wood, representing Families for Clean Air, related her concerns about areas in Marin County. She asked why certain neighborhoods have wood smoke pollution while other areas are not experiencing it. She feels there is a monitoring problem at a local and neighborhood level where people can be trapped in pockets of smoke. Ms. Wood asked a question about the complaint process that was addressed by staff after the public comment period.

Tracey Gant, a board member of Families for Clean Air, stated that she is a cell biologist and acts as a scientific advisor to the organization. She stated that when particulate pollution levels increase, we see increases in hospital visits, school absences and deaths; and this is known from epidemiological studies. Ms. Gant handed out information regarding air pollution and wood smoke pollution, to Board members. She stated that two recent studies of the effects of wood smoke at the cellular and molecular level showed high levels of free radicals and DNA damage, along with other serious health

concerns. She hoped the Air District would improve neighborhood monitoring, to enforce current regulation, and to continue to focus on the public health message.

Chair Bates closed the public comment period.

Mr. Broadbent commented that this program is three years old and it was a controversial program when it was adopted. At that time, the Board heard from the public, who were not supportive of the wood smoke rule, and the Board chose to stand for public health by implementing the rule. We have seen reductions of PM in the Bay Area, and that is a good thing. We hope that as the program continues, it will become part of our overall Bay Area culture; it will be understood and accepted that when we have certain conditions, people will not burn. There are still areas with elevated PM. This has to do with the meteorological and geographic conditions of those areas. We do want to focus on those neighborhoods.

Mr. Jeff McKay commented that this is a regional program but the Air District does monitor and does targeted outreach to specific areas, using information from the public and monitoring data from the Air District. A second complaint is not needed for there to be a discovery of a violation. We are taking a careful approach, which has evolved over multiple Spare the Air seasons, as to how exemptions are followed up and handled.

Director Uilkema had a question about information that is mailed after a complaint. Ms. Coler responded saying that upon receipt of a first-time complaint, a package of information and a warning letter is mailed to the resident. Director Uilkema suggested that as winter begins the Air District consider targeting problem neighborhoods directly with this information; local officials can also include the information in newsletters and other communications with constituents.

Director Wagenknecht agreed with the speakers regarding the localized concerns and suggested that enforcement be refined. 20% opacity is still illegal all year long. Encourage people to use the 1-877-NOBURN phone line.

Director Miley agreed with Director Uilkema. He complimented staff and said that enforcement is effective but is a work in progress.

Director Ross liked the graph on slide 9, showing the downward trend. The public health information is important to get out to the valley areas that have high PM 2.5 levels. He felt that overall the message has been received and told staff to keep up the good work.

Director Gorin noted that Sonoma has many valleys and hills. The timing of the outreach has passed, since we are currently at the end of the wood-burning season. She would like more information and specificity about where the complaints are originating. During this time we can work with local jurisdictions to do general outreach, and also include more specific and localized efforts. We need to provide this information to neighborhood associations, Parent-Teacher Associations and schools.

Director Kniss asked if there might be a typo regarding the number of complaints from Campbell, and what it means to burn cleanly. Staff responded that there is an active neighbor who is concerned about wood-burning and calls in complaints in the Campbell area. Seasoned dried wood is cleaner burning. Green wood smokes much more. Director Kniss asked about manufactured logs, Presto-logs, and if they are a clean burn? The logs are made from furniture manufacturing remnants and bound together with waxes; it is a cleaner burn but not allowed during Winter Spare the Air alerts. Director Kniss

said people are nostalgic about wood-burning, and it's important to talk about how to do that in a safer way. Staff noted that information about clean burning is on the website, and outreach to firewood sellers was done to make sure firewood is labeled correctly.

Director Zane requested that staff come back to the Board of Directors with recommendations to take back to local Boards and City Councils to do more outreach and collaboration. She requested that staff consider "red-flagging" problem neighborhoods to alert the public and to increase outreach in the problematic areas. This could be done with GIS mapping on the website. It would be great to see a list of best practices from other agencies in different parts of California.

Mr. Broadbent said that staff takes what was learned from the previous season and uses that information to define work in the future. Targeted outreach and working with community groups and local government will be part of the program that will start next fall. If we had a dry year, with very little rain, statistics would look a lot different. If we have a dry year next year, there may be more exceedances.

Director Spering asked what kind of outreach had been done to have cities and counties create local ordinances. Mr. Broadbent replied that the Air District had previously created and provided model ordinances and wanted to have wood-burning regulated locally in that manner. However, that method did not have results, and a regional approach was needed. Targeting at this time may work. Director Spering suggested that if we see continued complaints in a city, that a letter can be sent to the city with a model ordinance, and local communities can help with reporting.

Director Mar suggested that complaints be broken down according to zip code, so officials can determine problem areas within their communities. He also wanted to know about the effects of bonfires and how they affect the air, and to request that there be a follow-up on exemptions.

CLOSED SESSION

13a. Existing Litigation
13b. Public Employee Performance Evaluation

Chair Bates adjourned the meeting into a closed session at 11:10 a.m. The meeting was reconvened at 11:43a.m.

OPEN SESSION

Chair Bates reported that the Board of Directors had authorized Mr. Broadbent to drive and evaluate an electric vehicle as part of his regular duties, and this would be a change in the Executive Officer / Air Pollution Control Officer contract. There was no other reportable action.

PUBLIC COMMENT ON NON-AGENDA MATTERS

There was no public comment.

OTHER BUSINESS

14. Report of the Executive Officer/APCO

Mr. Broadbent asked Mr. Stevenson to report on the radiation levels measured by the Air District. Mr. Stevenson reported that radiation was detected at normal levels and there was nothing unusual. There was a spike that happened before the earthquake in Japan. There is information and links available on the Air District website. Mr. Stevenson stated that we are seeing impacts from Japan, but they are so small we cannot differentiate those from normal variations.

15. Chairperson's Report
Chair Bates announced that the meeting of April 20, 2011 has been cancelled. Chair Bates also let Board Members know that when a second Committee meeting occurs on a day where meetings are held back to back, the second or subsequent meetings will now have a more certain start time. Meeting starting times will no longer be "immediately after the previous meeting." Instead, specific times will be included on the agendas, and meetings will not start before the indicated time.

16. Time and Place of Next Meeting: Wednesday, May 4, 2011, 9:45 a.m. at 939 Ellis Street, San Francisco, CA 94109.

17. Adjournment: Chair Bates adjourned the meeting at 11:50 a.m.

Kris Perez Krow
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 25, 2011

Re: Board Communications Received from April 6, 2011 through May 3, 2011

RECOMMENDED ACTION:

None; receive and file.

DISCUSSION

A list of communications directed to the Board of Directors received by the Air District from April 6, 2011 through May 3, 2011 if any, will be at each Board Member's place at the May 4, 2011 Board meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Vanessa Johnson
Reviewed by: Rex Sanders

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 19, 2011

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

RECOMMENDED ACTION:

None; receive and file.

BACKGROUND

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

The out-of-state business travel summarized below covers the period April 1, 2011 through April 30, 2011. Out-of-state travel is reported in the month following travel completion.

DISCUSSION

Jack Broadbent, California Foundation for the Environment and Economy (CFEE), United Kingdom, April 14, 2011 through April 22, 2011.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

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

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Acting Secretary for Environmental Protection

Edmund G. Brown Jr.
Governor

TO: Members of the Board of Directors

FROM: Honorable Ken Yeager
Board Member

DATE: April 1, 2011

SUBJECT: QUARTERLY REPORT OF MY ACTIVITIES AS AN AIR RESOURCES BOARD MEMBER

The list below summarizes my activities as an Air Resources Board member from January 1 through March 31, 2011:

January Activities

19th — Meeting with General Motors – Update on GM's Restructuring, Their Advanced Technology Roll-Out Plans, and ARB's ZEV Mandate Policy

No meeting of the Air Resources Board in January

February Activities

14th — Air Resources Board Staff Briefing

24th — Air Resources Board Meeting, Sacramento

March Activities

No meeting of the Air Resources Board in March

Attachments: Public Agendas

California Environmental Protection Agency
AIR RESOURCES BOARD

LOCATION:

Air Resources Board
1001 I Street, 2nd Floor
Byron Sher Auditorium
Sacramento, California 95814

This facility is accessible by public transit. For transit information, call: (916) 321-BUSS, website http://www.sacrt.com/ (This facility is accessible to persons with disabilities.)

TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO:

http://www.arb.ca.gov/lispub/comm/bclist.php

PUBLIC MEETING AGENDA

February 24, 2011

Webcast

February 24, 2011
9:00 a.m.

DISCUSSION ITEM:

Note: The following agenda item will be the first item discussed at the Board meeting.

Agenda Item #	Agenda Topic
11-1-2	**Joint Meeting of the Air Resources Board and its Research Screening Committee to Discuss the Air Resources Board's Research Planning Process** *Staff will brief the Board on the implementation of the Air Resources Board's 2003-2010 Strategic Plan for Research. The Board will discuss with the Research Screening Committee members potential research priorities over the next 5 -10 years, and also discuss opportunities to influence research programs at academic institutions and other government agencies.* *Staff Presentation*

CONSENT CALENDAR:

This consent calendar will be voted on by the Board immediately after the first item is completed. Any item may be removed from the consent calendar by a Board member or by someone in the audience who would like to speak on that item. The following items are on the consent calendar:

Consent Item # Agenda Topic

11-1-1 **Public Meeting to Consider Seventeen Research Proposals**

1. Synthesis of Policy Relevant Findings from the CalNex 2010 Field Study," National Oceanic and Atmospheric Administration, Proposal No. 2716-269.
Proposed Resolution with Attachment

2. "Air Movement as an Energy Efficient Means Toward Occupant Comfort," University of California, Berkeley, Proposal No. 2705-269.
Proposed Resolution with Attachment

3. "Using Feedback from Commercial Buildings to Support Energy Conserving Behavior at Work and Beyond," University of California, Berkeley, Proposal No. 2713-269.
Proposed Resolution with Attachment

4. "Understanding Primary Organic Aerosol Volatility at Atmospherically Realistic Concentrations for SIP Analysis," University of California, Davis, Proposal No. 2708-269.
Proposed Resolution with Attachment

5. "Persistent Immune Effects of Wildfire Particulate Matter Exposure During Childhood Development," University of California, Davis, Proposal No. 2715-269.
Proposed Resolution with Attachment

6. "Location Specific Systemic Health Effects of Ambient Particulate Matter," University of California, Davis, Proposal No. 2706-269.
Proposed Resolution with Attachment

7. "Extended Analysis of the CARES Aerosol Chemistry Data to Characterize Sources and Processes of Organic Aerosol in the Sacramento Valley of California," University of California, Davis, Proposal No. 2712-269.
Proposed Resolution with Attachment

8. "Behavioral Responses to Real-Time Individual Energy Usage Information: A Large Scale Experiment," University of California, Los Angeles, Proposal No. 2714-269.
Proposed Resolution with Attachment

9. "Probing the Intrinsic Ability of Particles to Generate Reactive Oxygen Species and the Effect of Physiologically Relevant Solutes," University of California, Los Angeles, Proposal No. 2711-269.
Proposed Resolution with Attachment

10. "Construction of a DOAS Instrument for Installation at the Air Resources Board for the Low Level Measurement of SO_2 to Investigate the Relation Between SO_2 and Sulfate," University of California, Riverside, Proposal No. 2710-269.

Proposed Resolution with Attachment

11. "Development of a Portable In-Use Reference Particulate Matter Measurement System," University of California, Riverside, Proposal No. 2709-269.
Proposed Resolution with Attachment

12. "Calibrating, Validating, and Implementing Process Models for California Agriculture Greenhouse Gas Emissions," University of New Hampshire, Proposal No. 2707-269.
Proposed Resolution with Attachment

13. "Risk of Pediatric Asthma Morbidity from Multipollutant Exposures," University of California, Irvine, Proposal No. 2717-270.
Proposed Resolution with Attachment

14. "Residential Energy Use and Greenhouse Gas Emissions Impacts of Compact Land Use Types," University of California, Berkeley, Proposal No. 2719-270.
Proposed Resolution with Attachment

15. "The Cool California Carbon Challenge: a Pilot Intra- and Inter-Community Carbon Footprint Reduction Competition," University of California, Berkeley, Proposal No. 2718-270.
Proposed Resolution with Attachment

16. "Evaluation of Pollutant Emissions from Portable Air Cleaners," Lawrence Berkeley National Laboratory, Proposal No. 2721-270.
Proposed Resolution with Attachment

17. "Developing Databases to Estimate California-Specific Climate Forcing Benefits of Cool Roofs," Lawrence Berkeley National Laboratory, Proposal No. 2720-270.
Proposed Resolution with Attachment

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item #	Agenda Topic
11-1-3	**Public Meeting to Hear a Report on the Air Resources Board's Program Priorities for 2011** *Executive Officer James Goldstene will present to the Board a preview of anticipated Board activities in 2011.* *Staff Presentation*

11-1-4 **Public Meeting to Hear a Report on the Office of the Ombudsman**

Staff will update the Board on the implementation of the business plan for the Office of the Ombudsman and enhanced communication and stakeholder engagement, with emphasis on California small businesses.

Staff Presentation

11-1-5 **Public Meeting to Provide an Update on Discussions with the Southern California Association of Governments Concerning its 2035 Regional Greenhouse Gas Emissions Reduction Target**

As directed by the Board, staff will provide an update on discussions with the Southern California Association of Governments (SCAG) regarding SCAG's regional greenhouse gas reduction target for 2035.

More Information Staff Presentation

CLOSED SESSION – LITIGATION

The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation:

Pacific Merchant Shipping Association v. Goldstene, U.S. District Court (E.D. Cal. Sacramento), Case No. 2:09-CV-01151-MCE-EFB.

POET, LLC, et al. v. Goldstene, et al., Superior Court of California (Fresno County), Case No. 09CECG04850.

Rocky Mountain Farmers Union, et al. v. Goldstene, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09-CV-02234-LJO-DLB.
National Petroleum & Refiners Association, et al. v. Goldstene, et al., U.S. District Court (E.D. Cal. Fresno) Case No. 1:10-CV-00163-AWI-GSA.

Association of Irritated Residents, et al. v. California Air Resources Board, Superior Court of California (San Francisco County), Case No. CPF-09-509562.

Association of Irritated Residents, et al. v. U.S. E.P.A., 2011 WL 310357 (C.A.9), (Feb. 2, 2011).

California Dump Truck Owners Association v. California Air Resources Board, U.S. District Court (E.D. Cal. Sacramento) Case No. 2:11-CV-00384-MCE-GGH.

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future

AGENDA: 5

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 18, 2011

Re: Set Public Hearing to Consider Adoption of Proposed Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use; and Certification of a CEQA Environmental Impact Report

RECOMMENDED ACTION:

Set a Public Hearing for May 18, 2011 to consider adoption of a new rule, Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use; and consider the certification of a Final Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA).

BACKGROUND

In 2006, the California Air Resources Board (CARB) amended its Airborne Toxic Control Measure (ATCM) to include agricultural diesel engines. The ATCM required existing stationary agricultural diesel engines greater than 15 years old and greater than 100 HP (most engines) to meet emission standards by 12/31/2010, and those diesel engines from 50 – 100 HP to meet emissions standards by 12/31/2011. The ATCM exempts agricultural wind machines and agricultural emergency generators, however requires other infrequently-used agricultural engines to comply with the standards.

Regulation 11, Rule 17 would provide flexibility to affected parties in meeting the requirements of the ATCM. This proposed new rule is concerned primarily with low-use diesel driven water pumps used to protect agricultural crops from frost on cold winter nights. The proposed rule provides the option of an alternate compliance plan that will allow existing Tier 0 and Tier 1 engines (those with the highest emissions) that are used on average less than 100 hours per year and either located no less than 1000 feet from a residential area, school or health facility, or that conduct a successful Health Risk Screening Analysis, to be used through December 31, 2020. The alternate compliance plan allows Tier 2 engines that meet these criteria to operate through December 31, 2025. Additional provisions establish the criteria for utilizing the alternate compliance plan, provide for additional use during extreme frost seasons, and exempt engines used less than 20 hours per year.

By 2020, Tier 4 engines, utilizing the lowest-emitting technology, will be available. Consequently, by the time the existing engines are replaced, emission reductions of diesel particulate matter and nitrogen oxides (NOx) from these engine replacements will be greater than achieved by compliance with the ATCM.

DISCUSSION

Staff worked with consultants to evaluate potential environmental and socioeconomic impacts of Reg. 11, Rule 17. Adoption of this new rule will provide compliance flexibility to affected users, and reduce emissions of ozone precursors and toxics over the long term. During the interim period from 2011 through 2020 when replacement of certain agricultural diesel engines is deferred, emission reductions of NOx may be less than would have occurred under the ATCM. These temporarily foregone NOx reductions may be potentially significant compared to the District's CEQA Thresholds of Significance. Mitigation measures are proposed to fund NOx emission reduction projects through the District's grant program to reduce these potential NOx emissions to less than significant. During the interim period, toxic diesel particulate emissions were found to be less than significant for cancer risk, and less than significant for ground level concentrations of particulate matter 2.5 microns or smaller in size. After the interim period, Rule 11-17 reduces both ozone precursor emissions and toxic emissions significantly, beyond the emissions reductions achieved under the ATCM, and will benefit public health and the environment. In addition, the EIR considered greenhouse gas emissions from the replacement of existing agricultural diesel engines with future technology. The EIR concludes that any potential increases in greenhouse gases are less than significant. The EIR concludes that the project will not cause any unmitigated significant adverse environmental impacts.

The proposed rule provides a deferred compliance alternative to the ATCM. The benefit of this proposal is that the deferred replacement deadlines will allow further recovery of useful engine life and will allow the District's Agricultural Assistance Program funding to remain available for these engines until the proposed compliance dates (providing state law continues to make these funds available). These funds offset up to 85% (typically 60 – 75%) of the cost of a replacement. In addition, because it is optional, any incremental costs associated with deferred compliance (future purchase of cleaner, more expensive engines) do not have to be incurred by engine operators. A socio-economic analysis has determined that this proposed rule has no significant economic impact or loss of jobs.

RULE DEVELOPMENT PROCESS

The proposed rule is based on extensive outreach to the agricultural community through contact with each of the Bay Area county agricultural departments, and trade organizations such as each county's Farm Bureau, grape and flower growers associations, the California Poultry Association and Western United Dairymen's Association. Staff met with three county Farm Bureaus and the Suisun Valley Grape Growers Association, spoke at four county agricultural continuing education meetings, and provided a booth at the Napa Valley Viticulture Fair. Staff provided handouts regarding the requirement for agricultural engine registration with the District and the 11-17 proposal, as well as supplemental information about strategic incentive funding available to help replace existing diesel engines.
Staff conducted nine public workshops in January 2011 to solicit comments on the draft rule, with approximately 100 people attending the workshops. The final proposal incorporates a request to average engine use hours over three years to accommodate variability in weather conditions.

A public hearing notice; proposed Regulation 11, Rule 17; Draft Environmental Impact Report, socioeconomic analysis; and staff report are available by request and have been posted on the District's website at http://www.baaqmd.gov/Divisions/Planning-and-Research/Rule-Development/Current-Regulatory-Public-Hearings.aspx.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS:

An application process for the very low-use exemption or Alternate Compliance Plan (ACP) has been integrated into the existing Agricultural Diesel Engines Registration Program. Costs for this program will be offset through a one-time ACP application fee of $129, effective July 1, 2011. The existing registration program renewal fees adequately cover on-going administrative costs.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Guy A. Gimlen
Reviewed by: Henry Hilken

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 27, 2011

Re: Amend Executive Officer/APCO Employment Agreement

RECOMMENDATION:

Recommend Board of Directors approve the amended Employment Agreement between the Bay Area Air Quality Management District and the Executive Officer/Air Pollution Control Officer.

DISCUSSION:

Attached for your review and approval is the amendment to the Employment Agreement between the Bay Area Air Quality Management District and the Executive Officer/Air Pollution Control Officer (Amendment). This Amendment formally documents in the employment contract the Board of Directors' directive to have the Executive Officer/APCO assess and evaluate the functionality and related air quality issues related to electric and alternative fuel vehicles as part of the Executive Officer/APCO regular job duties and that this directive is in addition to, not replacement of, the Car Allowance provisions in the existing contract between the District and Executive Officer/APCO.

Respectfully Submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jason Jimenez
Reviewed by: Jack M. Colbourn

Attachment

AMENDMENT TO
EMPLOYMENT AGREEMENT
BETWEEN
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
AND
JACK P. BROADBENT

This **AMENDMENT TO EMPLOYMENT AGREEMENT**, dated as of the 4th day of May 2011 (the "Amendment Date") by and between the **Bay Area Air Quality Management District**, herein referred to as **"District"** and **Jack P. Broadbent**, herein referred to as **"Employee".**

Recitals

Whereas, the District and the Employee have entered into an Employment Agreement effective as of November 2, 2005 (the "Employment Agreement"); and

Whereas, the District and the Employee wish to enter into this amendment to the Employment Agreement, effective as of the Amendment Date (the "Amendment").

Agreement

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, the Employee and the District agree as follows:

1. Section V (F) of the Employment Agreement is hereby amended to remove the current language and replace it with the following:

"**F. Car Allowance**

1. District shall provide Employee, at Employee's option:

   A. The use of a District electric vehicle, District garage parking place and refueling station, provided Employee shall use such vehicle only in connection with District business and commuting to and from work, and further provided that Employee may use such vehicle in pursuit of routine, local errands in connection with his commute; or

   B. An automobile allowance of $675 (six hundred seventy-five dollars) per month.

2. Notwithstanding Paragraph F.1., above, as part of the employee's regular duties, the employee will be assigned electric and/or alternative fuel vehicles for regular use. This assignment of District vehicles is intended to allow the employee to assess and evaluate the functionality and related air quality issues of such vehicles. This assignment of District vehicles is in addition to, not replacement of Paragraph F.1., above."

2. Except as otherwise set forth in paragraph 1 of this Amendment, above, the terms of the Employment Agreement shall continue in effect.

3. The interpretation and construction of this Amendment shall be governed by the internal laws of the State of California as a contract to be performed in such state and without regard to the conflict of law provisions thereof.

4. This Amendment may be executed in one or more parts, including by electronic mail or facsimile, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement.

EMPLOYEE

Signed: Jack P. Broadbent

Date: May 4, 2011

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

By: Chairperson Tom Bates

Title: Chairperson of the Board of Directors

Date: May 4, 2011

AGENDA: 7

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 21, 2011

Re: Report of the Executive Committee Meeting of April 11, 2011

RECOMMENDED ACTION:

None; receive and file.

BACKGROUND

The Executive Committee met on Monday, April 11, 2011. The Committee received the following reports and updates:

A) Quarterly Reports of the Hearing Board: October – December 2010, and January 2011 – March 2011.

B) Joint Policy Committee Update.

C) Update on the Implementation of the Air District's California Environmental Quality Act (CEQA) Guidelines and Community Risk Reduction Plans (CRRP).

D) Production System Project Update.

Closed Session

E) Conference with Labor Negotiators (*Government Code § 54957.6(A)).*

Attached are the staff reports presented in the Executive Committee packet of April 11, 2011.

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

BUDGET CONSIDERATION/FINANCIAL IMPACT:

A) None; informational item.

B) None; informational item.

C) Resources to implement the CEQA Guidelines and support CRRPs are included in the FYE 2011 budget and the proposed FYE 2012 budget.

D) None; informational item.

Closed Session

E) No reportable action.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Kris Perez Krow
Reviewed by: Rex Sanders

Attachment(s)

AGENDA: 4

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

TO: Chairperson Tom Bates and Members of the Executive Committee

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

DATE: April 6, 2011

RE: Hearing Board Quarterly Report – October 2010 – December 2010 and January 2011 – March 2011

RECOMMENDED ACTION:

This report is provided for information only.

DISCUSSION:

Below is Hearing Board activity during the period from October 2010 through December 2010:

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Marin/Mill Valley	**Docket No. 3594** - APCO vs. 101 MILL VALLEY CORPORATION, a California corporation; COPELAND CREEK APARTMENTS LLC; PAUL GHAFOORI, individually and *d/b/a* COPELAND CREEK APARTMENTS LLC and *d/b/a* BPG PACIFIC LLC and *d/b/a* UNOCAL #7380; a GASOLINE DISPENSING FACILITY, located at 630 Blithedale Avenue, Mill Valley, California, Site No. C7948 - *Accusation and Request for Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearing held October 14, 2010; continued to October 21, 2011; filed dismissal noting EVR upgrade complete.	===	===

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Alameda/Union City	**Docket No. 3595** - APCO vs. SOM D. GUPTA, individually, *a/k/a* SON D. GUPTA, and *d/b/a* ANABE, INCORPORATED, ABE PETROLEUM LLC and AMI PETROLEUM, INC.; PAWAN K. GARG, *a/k/a* PAUL GARG, individually, *a/k/a* GARG PAWANK, and *d/b/a* AMI PETROLEIUM, INC.; ANABE, INCORPORATED, a California Corporation, and *d/b/a* AMI PETROLEUM and *d/b/a* ABE PETROLEUM; and a GASOLINE DISPENSING FACILITY, located at 33090 Mission Boulevard, Union City, Alameda County, California, Site No. C 1069, and *a/k/a* AMI PETROLEUM - *Accusation and Request for Order for Abatement; emissions of organic compounds from gasoline dispensing facilities*	8-7-302	Hearing Held October 14, 2010; Conditional Order for Abatement	===	===
Contra Costa/Antioch	**Docket No. 3596 -** APCO vs. REZA MAHMOODI, individually and *d/b/a* Hillcrest Fuel Mart and/or Hillcrest Valero; REZA INC., individually and *d/b/a* Hillcrest Fuel Mart and/or Hillcrest Valero; AMAN POHYAR, individually and *d/b/a* Hillcrest Fuel Mart and/or Hillcrest Valero; a Gasoline Dispensing Facility located at 1801 Hillcrest Avenue, Antioch, California, Site No. C9147 – *Accusation and Request for Order for Abatement; emissions of organic compounds from gasoline dispensing facilities*	8-7-302	Hearing Held October 21, 2010; Conditional Order for Abatement and Stipulation for Entry of Stipulated Conditional Order for Abatement	===	===
Solano/Vallejo	**Docket No. 3597** – APCO vs. SAEED GHAFOORI, a.k.a. PAUL GHAFOORI; BPG PACIFIC, LLC; ALI KAZEMINI; FERDOUS MOLLAI a.k.a. FERDOUS MOLLAI MEHRJERDI; JAGDEEP SIDHU; IVNINDER SIDHU; CYROUS BANI-HASHEMI; VALLEJO FAST GAS, Site No. C9361 - *Accusation and Request for Order for Abatement; emissions of organic compounds from gasoline dispensing facilities*	8-7-302	Hearing Held October 21, 2010; Conditional Order for Abatement	===	===

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Alameda/Fremont	**Docket No. 3598** - APCO vs. Cheuk Fung, individually, and *d/b/a* Max Gas, Warm Springs Valero, and/or Warm Springs Gas; Cheuk M. & Juilan Fung Trust; a Gasoline Dispensing Facility located at 39925 Mission Boulevard, Fremont, California, Site No. D0587, *a/k/a* Max Gas; a Gasoline Dispensing Facility located at 47700 Warm Springs Boulevard, Fremont, California, Site No. C8687 – *Accusation and Request for Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearing Held October 28, 2010; Conditional Order for Abatement Hearing held December 2, 2010; Amended Conditional Order for Abatement	===	===
Alameda/Oakland	**Docket No. 3599** - APCO vs. SALVATION ARMY, INC., a California corporation, and *d/b/a* SALVATION ARMY, a Gasoline Dispensing Facility, Site No. C0488; SAM TIBERMACINE, individually; DAVID BOYD - *Accusation and Request for Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearing Held October 28, 2010; Conditional Order for Abatement	===	===
Contra Costa/Richmond	**Docket No. 3600** - APCO vs. SURJIT RATTU, individually, and *a/k/a* SAM RATTU, and *d/b/a* CUTTING FOOD AND GAS, a Gasoline Dispensing Facility, Site No. D0450, *a/k/a* CUTTING MINI MARKET (ARCO); CUTTING FOOD AND GAS, INC., a California corporation, and *d/b/a* CUTTING FOOD AND GAS, *a/k/a* CUTTING MINI MARKET (ARCO) – *Accusation and Request for Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearing Held November 4, 2010; Conditional Order for Abatement	===	===
Contra Costa/Antioch	**Docket No. 3602** - RETAIL ALLIANCE, LLC - *Application for Interim and Regular Variance from regulation relating to Authority to Construct and requiring orderly procedures for review of new sources of air pollution and modification and operation of existing sources*).	2-1-301	Hearing Held November 18, 2010; Interim Variance denied; order – Hearing for regular Variance scheduled December 9, 2010; Variance w/d by applicant; Order for Dismissal Filed 12/9/10	10/27/10 to 9/28/11	===

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Santa Clara/Sunnyvale	**Docket No. 3603** – APCO vs. MOHSEN EFRAN KHAZIRI; ELENA KHAZIRI; and the Gasoline Dispensing Facility located at 724 N. Mathilda Avenue, Sunnyvale, California, Site No. D0284, known as Sunnyvale Beacon Gas and Carwash, also known as Chevron and/or Sunnyvale Carwash - *Accusation and Request for Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearings Held December 9, 2010; Conditional Order for Abatement	===	===
Santa Clara/Sunnyvale	**Docket No. 3603** – APCO vs. MOHSEN EFRAN KHAZIRI; ELENA KHAZIRI; and the Gasoline Dispensing Facility located at 724 N. Mathilda Avenue, Sunnyvale, California, Site No. D0284, known as Sunnyvale Beacon Gas and *Carwash, also known as Chevron and/or Sunnyvale Carwash – Request for Modification of Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearings Held to consider Modification of Order Held January 27, 2011; Amended Conditional Order for Abatement Filed	===	===
Santa Clara/Santa Clara	**Docket No. 3604** – CALIFORNIA PAPERBOARD CORPORATION – *Request for a Short Term Variance from Regulation 2, Rule 1, Section 307, insofar as they require compliance with Condition No. 19838.1.*	2-1-307	Hearing scheduled for December 23, 2010; applicant requests withdrawal; Order for Dismissal Filed	11/19/10 to 11/30/10	===
Contra Costa/Richmond	**Docket No. 3605** – CHEVRON PRODUCTS COMPANY – *Request for an Emergency Variance from Regulation 8, Rule 5, Section 321.1; primary seal requirements of storage tank equipment.*	8-5-321.1	Final Order Granting Emergency Variance	11/17/10 to 12/17/10	===

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Contra Costa/Crockett	**Docket No. 3606** – CROCKETT COGENERATION – *Request for an Emergency Variance from Regulation 2, Rule 2, Section 301; Condition 14970; parts 27 & 29 and from Regulation 2, Rule 6, Section 307 relating to review of new and modified sources, use of BACT, TBACT and emission offsets and non-compliance of Major Facility Review requirements*	2-2-301 2-6-307	Final Order Granting Emergency Variance	12/18/10 to 1/17/11	===
Alameda/Hayward	**Docket No. 3607** - CALIFORNIANS FOR RENEWABLE ENERGY, INC. (CARE) – *Appeal of Russell City Energy Center for an Issuance of Authority to Construct and Request for Fee Waiver.*	ATC	Pro Forma Hearing 1/6/11; Hearing Held 2/2/11; Order Approved Denying Fee Waiver, Application for leave to intervene, Denying motion to strike document and/or continue hearing and Dismissing Appeal for lack of jurisdiction.	===	===
Alameda/Hayward	**Docket No. 3608** – APPEAL OF ROBERT SIMPSON – *Appeal of an Issuance of Authority to Construct and Request for Fee Waiver.*	ATC	Received Appeal without Filing Fee; matter closed	===	===
Alameda/Hayward	**Docket No. 3609** – APPEAL OF CITIZENS AGAINT POLLUTION – *Appeal of an Issuance of Authority to Construct and Request for Fee Waiver.*	ATC	Received Appeal without Filing Fee; matter closed	===	===

Below is Hearing Board activity during the period from January 2011 through March 2011:

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Santa Clara/San Jose	**Docket No. 3610** – APCO vs. PETROMART RETAIL GROUP, INC., a California corporation, and d/b/a TULLY SHELL AUTO CARE, a Gasoline Dispensing Facility, Site No. C9696; GAWFCO ENTERPRISES, INC., a California corporation; TEDDY IP, an individual, d/b/a TULLY SHELL AUTO CARE; MING SHIU, an individual, d/b/a TULLY SHELL AUTO CARE; THANH Q. TU, an individual, d/b/a TULLY SHELL AUTO CARE - *Accusation and Request for Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearing Held March 3, 2011; EVR Upgrade verified as complete; Order for Dismissal	===	===
Alameda/Hayward	**Docket No. 3611** – APCO vs. BALJIT GREWAL, an individual, and *d/b/a* SERVO GAS – FOOTHILL BOULEVARD, a Gasoline Dispensing Facility, Site No. D0337 - *Accusation and Request for Conditional Order for Abatement; emissions of organic compounds from gasoline dispensing facilities.*	8-7-302	Hearing Scheduled for March 3, 2011; EVR Upgrade verified as complete; Dismissed.	===	===
Contra Costa/Richmond	**Docket No. 3612** – CHEVRON PRODUCTS COMPANY – *Request for an Emergency Variance from Regulation 8, Rule 5, Section 321.3 –primary seal requirements of storage tank equipment*	8-5-321.3	Emergency Variance approved	1/31/11 to 3/1/11	===
Contra Costa/Richmond	**Docket No. 3613** – CHEVRON PRODUCTS COMPANY – *Request for a Regular Variance from Regulation 8, Rule 5, Section 321.1 Regulation 8, Rule 5, Section 321.3.1; Regulation 8, Rule 5, Section 321.3.2; Regulation 2, Rule 1, Section 307; Regulation2, Rule 6, Section 307; and Standard Conditions 1.A and 1.B.2 of Applicant's Major Facility Review Permit*	8-5-321.1 8-5-321.3.1 & 321.3.2 2-1-307 2-6-307 Stnd Condtns 1.A & 1.B.2	Hearing Scheduled for April 7, 2011; Withdrawn by Applicant	3/2/11 to 8/31/11	===

COUNTY/CITY	PARTY/PROCEEDING	REGULATION(S)	STATUS	PERIOD OF VARIANCE	ESTIMATED EXCESS EMISSIONS
Santa Clara/San Jose	**Docket No. 3614** – APPEAL OF ROBERT M. SARVEY ON THE LOS ESTEROS CRITICAL ENERGY FACILITY – *Appeal on the Issuance of Authority to Construct for Facility ID #B3289*	ATC	Pro Forma Hearing Scheduled for April 21, 2011 to consider fee waiver, request for intervention, and set briefing schedule	===	===

FOURTH QUARTER NOTES:

- During the fourth quarter of 2010, the Hearing Board and Clerk scheduled for hearing and processed fourteen (14) Accusations and Applications for Variances and Appeals, some of which were withdrawn before or at the hearings or negotiated compliance plans with the Legal Division, (Dockets 3599, 3602, and 3604). The Accusations were brought against gas station owners who have not complied with the April 30, 2010 ARB deadline for EVR compliance.
- Two additional Appeals were received and filed (Dockets 3608 and 3609); however, filing fees were not received from appellants and the dockets were not acted upon and closed.
- The Hearing Board approved thirteen (13) Orders.
- The Hearing Board also received a status update from the District Counsel of all outstanding Abatement Orders at the Hearing Board's December 2, 2010 meeting.
- Hearing Board Subcommittee member Christian Colline met with the Hearing Board Clerk on December 15, 2010 and further revisions were made to the Hearing Board Rules.
- The Hearing Board collected $8,667 during the fourth quarter of 2010.

FIRST QUARTER NOTES:

- During the first quarter of 2011, the Hearing Board and Clerk processed five (5) Accusations and applications for Variances and Appeals, some of which were withdrawn before or during the hearings (Dockets 3610, 3611 and 3613). The Hearing Board scheduled four (4) hearings and approved six (6) Orders.
- Status reports and requests for continuance were received for two dockets; one of which was heard and approved for further continuance; and one docket was approved as modified by the Hearing Board.

- Two Appeals were received but not filed due to non-receipt of filing fees.
- The Hearing Board collected $9896.27 during the first quarter of 2011.
- Hearing Board Subcommittee Member Christian Colline met with the Hearing Board Clerk on March 30, 2011 and updated the Hearing Board Rules. The final Hearing Board Rules have been noticed and sent out for final comment and are expected to be approved in April 2011.

EXCESS EMISSION DETAILS

COMPANY NAME	DOCKET NO.	TOTAL EMISSIONS	TYPES OF EMISSIONS	PER UNIT COST	TOTAL AMT COLLECTED
					$ 0
				TOTAL COLLECTED:	**$ 0**

Respectfully submitted,

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

Prepared by: Lisa Harper
Reviewed by: Rex Sanders

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 25, 2011

Re: Joint Policy Committee Update

RECOMMENDED ACTION:

None; receive and file.

DISCUSSION

Ted Droettboom will provide an update on the activities of the Joint Policy Committee.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jean Roggenkamp
Reviewed by: Rex Sanders

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 28, 2011

Re: Update on the Implementation of the District's CEQA Guidelines and Community Risk Reduction Plans

RECOMMENDED ACTION:

Information only.

BACKGROUND

On June 2, 2010, the Bay Area Air Quality Management District Board of Directors unanimously adopted the CEQA thresholds of significance. The thresholds of significance are included in the Air District's updated CEQA Guidelines (June 2010). All of the adopted CEQA thresholds of significance – *except for the risk and hazards thresholds for new receptors* – are effective as of June 2, 2010. The risk and hazards thresholds for new receptors will become effective on May 1, 2011. On June 2, 2010 the Board also directed staff to report to the Board periodically on the implementation progress of the CEQA Guidelines and thresholds.

DISCUSSION

Since adoption of the CEQA thresholds, Air District staff has continued to meet extensively with local government officials and staff, developers, consultants, and stakeholder groups. Staff has met with staff from many local jurisdictions to discuss specific CEQA projects; has responded to numerous phone and email inquiries from local government staff, developers, and consultants; and has presented the CEQA Guidelines and thresholds to a number of stakeholder group meetings. It is clear that local lead agencies are familiar with the CEQA Guidelines, are using them in environmental review processes, and understand they may call upon District staff for assistance.

Staff conducted a series of three workshops in February and March 2011 to receive feedback from local government staff and others on the implementation of the CEQA Guidelines and to present updates on tools and methodologies being developed to assist local governments in applying the CEQA Guidelines. The workshops were held in Santa Rosa (2/22/11), Oakland (2/23/11), and Mountain View (3/3/11). Approximately 150 people attended the three workshops

including representatives from over 30 Bay Area local governments and various agencies, consultants, and non-profit groups.

Staff is continuing its work on the development of pilot Community Risk Reduction Plans (CRRPs) in San Jose and San Francisco. Staff is collaborating with San Jose staff on preparing the local emissions inventory for the city's CRRP. Staff also assisted with San Jose's outreach efforts including coordination of two public workshops on the CRRP. Staff is meeting regularly with San Francisco planning and health department staff to discuss modeling inputs and potential thresholds the city can use in their CRRP. Staff is also coordinating with San Francisco on modeling and estimating reductions from air filtration as a risk reduction strategy.

Staff is also preparing Community Development Guidelines to simply the process for lead agencies in analyzing and mitigating risk and hazard impacts in proposed projects. Staff intends to provide a worksheet or checklist that outlines standardized setbacks and mitigation measures lead agencies can consider in their projects. Staff is continuing work on modeling local emissions and pollutant concentrations for roadways and stationary sources and estimating various potential risk reduction strategies to be part of the Community Development Guidelines.

The staff initiated an Air Quality Priority Development Area (PDA) workgroup with MTC and ABAG and is continuing to meet on a monthly basis. Staff is working with MTC and ABAG to assure that station area plans address risk and hazards on a community-wide approach. This effort will help streamline CEQA reviews for future proposed projects in station area plans. Staff presented on the recommended risk and hazard analysis approach for station area plans at MTC's recent Station Area Planning Workshop.

Staff will provide an update to the Executive Committee on implementation of the CEQA Guidelines, Air District collaboration with the other regional agencies, and progress on the CRRPs and Community Development Guidelines.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

Resources to implement the CEQA Guidelines and support CRRPs are included in the FYE 2011 and proposed FYE 2012 budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Sigalle Michael
Reviewed by: Henry Hilken

AGENDA: 7

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 29, 2011

Re: Production System Project Update

RECOMMENDED ACTION:

None, receive and file.

DISCUSSION:

Staff will present the current status of this multi-year project, and a brief description of the next milestones. In December of 2006 staff presented the plan for implementation of the new production system. At that time, staff indicated that execution of the plan would be accompanied by detailed reports on the project status and accomplishments.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: John Chiladakis
Reviewed by: Jeffrey McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 21, 2011

Re: Report of the Budget & Finance Committee Meeting of April 28, 2011

RECOMMENDED ACTION:

The Committee may recommend Board of Directors' approval of the following:

A) Adoption of the Proposed Fiscal Year Ending (FYE) 2012 Budget

BACKGROUND

The Budget & Finance Committee will meet on Thursday, April 28, 2011. The Committee will receive the following reports and recommendations:

A) Third Quarter Financial Report for FYE 2011

B) Update on Proposed Fee Amendments for FYE 2012

C) Continued Discussion of FYE 2012 Proposed Air District Budget and Consideration to Recommend Adoption

Attached are the staff reports presented in the Budget and Finance Committee packet.

Chairperson Carole Groom will give an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

A) No impact on the FYE 2011 budget.

B) The draft fee amendments are expected to increase fee revenue in FYE 2012 by approximately 5% from FYE 2011 budgeted levels, or $1.54 million. This revenue has been included in the proposed FYE 2012 budget. Even with these fee increases, the Air District will likely need to make relatively modest use of its reserve funds in FYE 2012.

C) The proposed consolidated budget for FYE 2012 is $72,360,101 and is a balanced budget with the inclusion of $895,000 from the Reserve for Economic Uncertainties.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Submitted by: Kris Perez Krow
Reviewed by: Rex Sanders

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Groom and Members
of the Budget and Finance Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 12, 2011

Re: Third Quarter Financial Report for Fiscal Year Ending (FYE) 2011

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Finance staff will present an update on the District's financial results for the third quarter of FYE 2011. The following information summarizes those results.

GENERAL FUND BUDGET: STATEMENT OF REVENUE
Comparison of Budget to Actual Revenue

- County receipts $11,783,050 56% of budgeted revenue
- Permit Fee receipts $20,628,974 82% of budgeted revenue
- Title V Permit Fees $2,686,849 81% of budgeted revenue
- Asbestos Fees $1,333,318 84% of budgeted revenue
- Toxic Inventory Fees $470,708 70% of budgeted revenue
- Penalties and Settlements $1,404,127 94% of budgeted revenue
- Miscellaneous Revenue $32,446 27% of budgeted revenue
- Interest Revenue $161,174 59% of budgeted revenue

GENERAL FUND BUDGET: STATEMENT OF EXPENDITURES
Comparison of Budget to Actual Expenditures

- Personnel – Salaries $21,491,807 70% of budgeted expenditures
- Personnel - Fringe Benefits $8,942,811 63% of budgeted expenditures
- Operational - Services and Supplies $10,387,495 43% of budgeted expenditures
- Capital Outlay $3,138,653 87% of budgeted expenditures

Cash and Investments in County Treasury:

General Fund	$17,804,625
TFCA	$57,541,017
MSIF	$33,628,038
Carl Moyer	$9,296,864
CA Goods Movement	$23,992,568
	$142,263,112

Investments Held as:

Fixed Income Investments	45% of total investment pool
Short Term Investments	55% of total investment pool

FUND BALANCES

	6/30/2009 Audited	6/30/2010 Audited	6/30/2011 Projected
Imprest Cash	$500	-	-
Building and Facilities	1,731,690	1,731,690	4,731,690
PERS Funding	2,300,000	1,900,000	1,500,000
Radio Replacement	75,000	75,000	75,000
Capital Equipment	130,425	130,425	1,219,818
Contingencies	400,000	-	-
Post-Employment Benefits	-	-	2,000,000
Worker's Compensation	1,000,000	1,000,000	1,000,000
Economic Uncertainties	9,277,570	7,816,963	130,660
TOTAL SPECIAL RESERVES	$14,915,185	$12,654,078	$10,657,168
UNDESIGNATED	411,797	288,477	411,797
TOTAL FUND BALANCES	$15,326,982	$12,942,555	$11,068,965

BUDGET CONSIDERATION/FINANCIAL IMPACT
No impact on Fiscal Year 2010/2011 budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

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

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Groom and Members
of the Budget and Finance Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 18, 2011

Re: Update on Proposed Fee Amendments for Fiscal Year Ending (FYE) 2012

RECOMMENDED ACTION

None; receive and file

BACKGROUND

Staff provided the Budget and Finance Committee with a summary of staff's proposed fee amendments for FYE 2012 at the committee meeting held on March 23, 2011.

The proposed fee amendments were designed to increase fee revenue from FYE 2011 budgeted levels by 5 percent. With this increase in fee revenue, and implementation of cost containment measures included in the proposed FYE 2012 budget, staff expects that reserve funds would not need to be drawn-down below minimum levels that the Board has deemed to be appropriate.

Due to a shortfall between budgeted and actual fee revenue resulting from decreased levels of business activity and emissions, fee rates will need to be increased by an average of 10 percent to reach the revenue target included in the proposed FYE 2012 budget. This assumes that fees related to facility activity levels will not significantly rebound in FYE 2012, which staff believes is a reasonable assumption because: (1) although the Bay Area is experiencing a cyclical economic rebound, there are downside risks that could slow the recovery (e.g., if oil prices remain elevated and/or job creation is slowed by layoffs in the public sector), (2) facility permit renewal fees are based on activity levels from the preceding year, so there is a time difference between when increased activity levels occur and when increased fee revenue is received, (3) some of the recent decreases in emissions-based fees are due to permanent decreases in emissions resulting from regulatory requirements, (4) permit applications for major new power plants have historically been a major contributor to permit application fee revenue, but no such applications are expected to be submitted in FYE 2012 as four new major power plants have been permitted or are in the final stages of being permitting in the Bay Area in the last year, and a permit application for a fifth proposed plant has already been submitted with permit fees paid. If facility activity-based fee revenue should rebound in FYE 2012 beyond current expectations, this can be taken into consideration in developing fee amendments for the FYE 2013 budget cycle.

The specific fee increases being proposed were based on the results of the recently completed 2011 Cost Recovery and Containment Study prepared by Matrix Consulting Group. Existing fee schedules would be amended as follows:

(1) no change for fee schedules that are recovering greater than 89% of costs;
(2) a 2% cost of living increase in registration fees (all of which have been established in recent years based on considerations of cost recovery);
(3) a 10% increase in:
    a) fee schedules that are recovering 70 – 89% of costs; and
    b) other administrative fees such as permit application filing fees;
(4) a 12% increase in fee schedules that are recovering 50 – 69% of costs; and
(5) a 14% increase in fee schedules that are recovering less than 50% of costs.

DISCUSSION

Staff has not made any substantive changes in the fee proposal since the last committee meeting. At the April 28, 2011 Budget and Finance Committee meeting, staff will provide the Committee with a brief review of the proposal, along with an update on additional public comments received. The public hearing to consider adoption of the portions of the proposed fee amendments that apply to permitted sources has been scheduled for May 4, 2011. A second hearing to consider adoption of the portions of the proposed fee regulation that apply to non-permitted sources has been scheduled for June 15, 2011.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The draft fee amendments are expected to increase fee revenue in FYE 2012 by approximately 5% from FYE 2011 budgeted levels, or $1.54 million. This revenue has been included in the proposed FYE 2012 Budget. Even with these fee increases, the Air District will likely need to make relatively modest use of its reserve funds in FYE 2012.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian Bateman
Reveiwed by: Jeffrey McKay

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Groom and Members
of the Budget and Finance Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 12, 2011

Re: Continued Discussion of Fiscal Year Ending (FYE) 2012 Proposed District Budget and Consideration to Recommend Adoption

RECOMMENDED ACTION

Consider recommending Board of Directors adoption of the proposed FYE 2012 Budget.

BACKGROUND

At the March 16, 2011 regular Board of Directors Meeting, the FYE 2012 Proposed Budget Document was referred to the Budget and Finance Committee for review at the Committee's March 23, 2011 meeting.

DISCUSSION

Staff presented the proposed budget for FYE 2012 at the March 23, 2011 Budget and Finance Committee Meeting. The proposed budget is balanced utilizing the following accounts: a) General Fund Revenues, b) Transfers-In from the Reserve for Economic Uncertainties, c) TFCA Revenues, d) Indirect Cost Recovery and, e) Mobile Source Incentive Revenues totaling $72.4 million. Proposed consolidated expenditures are $72.4 million, excluding grant program distributions. Proposed capital requests are $2.1 million. The proposed budget does not include an FTE increase.

Prior to April 11, 2011, staff published a notice to the general public that the first of two public hearings on the budget will be conducted on May 4, 2011 and that the second hearing will be conducted on June 15, 2011.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The proposed consolidated budget for FYE 2012 is $72,360,101 and is a balanced budget with the inclusion of $895,000 from the Reserve for Economic Uncertainties.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: David Glasser
Reviewed by: Jack Colbourn

AGENDA: 9

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 21, 2011

Re: Report of the Mobile Source Committee Meeting of May 2, 2011

RECOMMENDED ACTIONS

The Committee may recommend that the Board of Directors take the following actions:

A) Consideration of Projects with Proposed Grant Awards Over $100,000:

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

B) Consideration of approximately $20 Million in I-Bond Funding for Bay Area Ports:

1. Approve the proposed and alternate California Goods Movement Bond (I-Bond) shore power projects;
2. Authorize the Executive Officer/APCO to enter into agreements for the proposed projects.

C) Consideration of Air District Participation in LGER Project and Allocation of $182,025 in Matching Funds:

1. Adopt a resolution (attached) authorizing the Executive Officer/APCO to accept a grant from the California Air Resources Board (CARB) of up to $182,025 and committing the Air District to comply with the Lawn and Garden Equipment (LGER) Replacement Project requirements, and allocating up to $182,025 in Mobile Source Incentive Funding (MSIF) as matching funds;
2. Authorize the Executive Officer/APCO to execute all necessary agreements with the CARB relating to the Air District's receipt of LGER Project funds for FYE 2011.

D) Consideration of TFCA CPM Expenditure Plans for FYE 2012, and Allocation of FYE 2008 TFCA Funds to the Napa County Program Manager:

1. Approve the allocation of FYE 2012 Transportation Fund for Clean Air (TFCA) County Program Manager (CPM) Funds listed on Table 1 of the staff report;
2. Authorize the Executive Officer/APCO to enter into funding agreements with the CPMs for the total funds to be programmed in FYE 2012, listed on Table 1 of the staff report, consistent with the Board-adopted TFCA CPM Fund Policies;
3. Approve the allocation of $68,020.50 in remaining FYE 2008 TFCA County Program Manager funds to the Napa County Transportation and Planning Agency, and authorize the Executive Officer/APCO to amend the funding agreement with the agency to include the additional allocation

BACKGROUND

The Mobile Source Committee will meet on Monday, May 2, 2011. The Committee will receive and consider the following reports and recommendations:

A) Consideration of Projects with Proposed Grant Awards Over $100,000.

B) Consideration of Approximately $20 Million in I-Bond Funding for Bay Area Ports.

C) Consideration of Air District Participation in LGER Project and Allocation of $182,025 in Matching Funds.

D) Consideration of TFCA CPM Expenditure Plans for FYE 2012, and Allocation of FYE 2008 TFCA Funds to the Napa County Program Manager.

Attached are the staff reports that are 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 CMP, MSIF and TFCA, the Air District distributes "pass-through" funds to public agencies and private entities on a reimbursement basis. Administrative costs for both programs are provided by each funding source.

B) None. The Air District receives funding for the administration of incentives under the I-Bond program.

C) None. Through the LGER Project and MSIF, the Air District distributes "pass-through" funds on a reimbursement basis. Administrative costs of up to 9% of the Air Quality Improvement Program (AQIP) funds awarded to the Air District will be used for related administrative expenses.

D) None. TFCA CPM Fund revenues are generated from a dedicated outside funding source and are passed through to CPMs.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Kris Perez Krow
Reviewed by: Rex Sanders

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: April 19, 2011

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

RECOMMENDATIONS:

Recommend Board of Directors:

1. Approve Carl Moyer Program projects with proposed grant awards over $100,000.

2. Authorize the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program projects.

BACKGROUND

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

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

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

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

On March 17, 2010, the Board of Directors authorized Air District participation in Year 12 of the CMP, and authorized the Executive Officer/APCO to execute grant agreements and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to $100,000. On November 18, 2009, the Air District Board of Directors authorized the Executive Officer/APCO to execute grant agreements and amendments for projects funded with TFCA funds, with individual grant award amounts up to $100,000.

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

DISCUSSION

Carl Moyer Program:

The Air District started accepting applications for CMP Year 12 projects on May 3, 2010. The Air District has approximately $19 million available for CMP projects from a combination of MSIF and CMP funds. Project applications are being accepted and evaluated on a first-come, first-served basis.

As of April 14, 2011, the Air District had received 151 project applications. Of the applications that have been evaluated between March 8, 2011, and April 14, 2011, 18 eligible projects have proposed individual grant awards over $100,000. These projects will replace 41 pieces of off-road equipment and 11 marine engines, which will result in the reduction of 33 tons of NOx, ROG and PM per year. Staff recommends allocating $3,138,251 to these projects from a combination of CMP funds and MSIF revenues. Attachment 1 to this staff report provides additional information on these projects.

Attachment 2 lists all of the eligible projects that have been received by the Air District as of April 14, 2011, and summarizes the allocation of funding by equipment category (Figure 1), and county (Figure 2). This list also includes the Voucher Incentive Program (VIP) on-road replacement projects awarded to date. Approximately 32% of the funds have been awarded to projects that reduce surplus emissions in highly impacted Bay Area communities.

TFCA:

No TFCA applications requesting individual grant awards over $100,000 received between March 8, 2011, and April 14, 2011 are being forwarded for approval at this time.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

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

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Anthony Fournier
Reviewed by: Damian Breen

Attachment 1: BAAQMD Year 12 Carl Moyer Program/MSIF projects with grant awards greater than $100,000 (evaluated between 3/8/11 and 4/14/11)

Attachment 2: Summary of all CMP Year 12/MSIF and VIP approved/eligible projects (evaluated between 5/3/10 and 4/14/11)

Attachment 1

BAAQMD Year 12 Carl Moyer Program/ MSIF projects with grant awards greater than $100k
(Evaluated between 3/8/2011 and 4/14/2011)

Project #	Applicant name	Equipment category	Project description	Proposed contract award	NOx (TPY)	ROG (TPY)	PM (TPY)	County
12MOY80	Colinas Farming Company	Off-road	The replacement of five (5) off-road diesel powered tractors.	$ 179,718.00	0.517	0.105	0.043	Napa
12MOY88	Dale Ricci dba Ricci Vineyards Carneros, Inc.	Off-road	The replacement of four (4) off-road diesel powered tractors.	$ 111,720.00	0.269	0.081	0.027	Sonoma
12MOY82	Domaine Carneros Ltd. (Vineyard)	Off-road	The replacement of six (6) off-road diesel powered tractors.	$ 190,056.00	1.293	0.247	0.092	Napa
12MOY95	Neil McIsaac & Son Inc. (Dairy)	Off-road	The replacement of one (1) off-road diesel powered loader.	$ 112,978.00	0.726	0.123	0.037	Sonoma
12MOY97	Albert and Teresa Moretti dba Moretti Dairy	Off-road	The replacement of one (1) off-road diesel powered loader.	$ 112,978.00	0.639	0.108	0.032	Sonoma
12MOY85	R. Rossi Co. / Fernando Muzzi (Farmer)	Off-road	The replacement of two (2) off-road diesel powered tractors.	$ 105,871.00	0.782	0.119	0.037	San Mateo
12MOY102	Larry and Marsha Bettinelli dba Bettinelli Vineyard Management	Off-road	The replacement of five (5) off-road diesel powered tractors.	$ 176,436.00	0.747	0.179	0.077	Napa
12MOY94	Andrew J. Poncia dba Poncia Fertilizer Spreading	Off-road	The replacement of two (2) off-road diesel powered tractors.	$ 216,158.00	3.203	0.372	0.123	Sonoma
12MOY16	Superfish charters (Charter fishing)	Marine	The replacement of two (2) main engines in the marine vessel: Super Fish.	$ 138,000.00	0.609	-0.021	0.022	Alameda
12MOY112	Global Materials Recovery Services, Inc.	Off-road	The replacement of two (2) off-road diesel powered loaders.	$ 245,592.00	1.272	0.220	0.053	Sonoma
12MOY127	Ferrari-Carano Vineyards & Winery, LLC	Off-road	The replacement of five (5) off-road diesel powered tractors.	$ 192,899.00	0.569	0.130	0.040	Sonoma/ Napa
12MOY136	F/V Intrepid, Inc. (Commercial fishing)	Marine	The replacement of one (1) main engine in the marine vessel: Imperial.	$ 134,805.00	0.881	0.015	0.026	San Francisco
12MOY124	Richard's Grove & Saralee's Vineyard, Inc.	Off-road	The replacement of three (3) off-road diesel powered tractors.	$ 103,727.00	0.509	0.102	0.032	Sonoma
12MOY141	McClelland's Dairy	Off-road	The replacement of three (3) off-road diesel powered tractors.	$ 223,348.00	1.424	0.223	0.079	Sonoma
12MOY92	Yachting Specalties, Inc. (Work boat)	Marine	The replacement of two (2) main engines in the marine vessel: Assist Golden Gate.	$ 127,474.00	0.563	-0.014	0.020	Contra Costa
12MOY99	Riverview Equipment Company LLC	Marine	The replacement of two (2) main engines in the marine vessel: Barbara Lind.	$ 148,510.00	2.167	-0.059	0.079	Solano
12MOY138	C & W DIVING SERVICES, INC.	Marine	The replacement of four (4) engines in the marine vessel: Denise Lind.	$ 416,642.00	7.637	-0.012	0.232	Alameda
12MOY145	Salt River Construction Corp.	Off-road	The replacement of two (2) engines in two off-road, diesel powered excavators.	$ 201,339.00	5.392	0.554	0.198	Contra Costa
				$ 3,138,251.00	**29.2**	**2.5**	**1.2**	

Attachment 2

Summary of all CMP Yr 12/ MSIF and VIP approved/ eligible projects (5/3/10 to 4/14/11)

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	NOx (TPY)	ROG (TPY)	PM (TPY)	Board approval date	County
12MOY2	Agriculture	Engine repower	3	$ 57,831.00	Nichelini Vineyards, LLC	0.648	0.078	0.021	APCO	Napa
12MOY8	Off-road	Equipment replacement & retrofit	1	$ 201,620.00	Evergreen Supply	1.556	0.185	0.075	8/4/2010	Santa Clara
12MOY11	Off-road	Equipment replacement	2	$ 43,833.00	Domenico J. Carinalli, Jr. (Farmer)	0.141	0.047	0.015	APCO	Sonoma
12MOY5	Agriculture	Engine repower	1	$ 35,119.00	Carpenter Ranchs Inc	0.542	0.079	0.022	APCO	Napa
12MOY6	Agriculture	Engine repower	1	$ 28,163.00	Vimark Inc.	0.218	0.027	0.008	APCO	Sonoma
12MOY18	Off-road	Equipment replacement	1	$ 115,900.00	Don Moreda JR. (Dairy)	0.318	0.087	0.035	10/6/2010	Sonoma
12MOY7	Agriculture	Engine repower	1	$ 28,798.00	Beard Family Vineyards	0.223	0.030	0.009	APCO	Napa
12MOY4	Off-road	Equipment replacement	1	$ 115,887.00	Andy Poncia (Fertilizer/farm support)	0.790	0.133	0.040	10/6/2010	Sonoma
12MOY10	Off-road	Equipment replacement	1	$ 39,868.00	Daniel H. Evans (farmer)	0.227	0.041	0.011	APCO	Marin
12MOY19	Agriculture	Engine repower	9	$ 187,170.00	Skalli Corporation DBA St. Supery	4.396	0.528	0.156	10/6/2010	Napa
12MOY26	Off-road	Equipment replacement	1	$ 108,517.00	Gerald & Kristy Spaletta (Dairy)	0.645	0.110	0.033	10/6/2010	Sonoma
12MOY28	Off-road	Equipment replacement	2	$ 69,940.00	Terrilinda Dairy	0.468	0.085	0.022	APCO	Sonoma
12MOY22	Off-road	Equipment replacement	4	$ 122,062.00	ST Francis Winery& Vineyards	0.412	0.086	0.030	10/6/2010	Sonoma
12MOY9	Off-road	Equipment replacement	1	$ 31,260.00	Deniz Dairy	0.379	0.068	0.018	APCO	Sonoma
12MOY27	Off-road	Equipment replacement	1	$ 35,386.00	Alfred Corda	0.189	0.034	0.009	APCO	Marin
12MOY30	Agriculture	Engine repower	2	$ 31,610.00	Beckstoffer Vineyards	0.888	0.112	0.032	APCO	Napa
12MOY21	Marine	Engine repower	2	$ 149,288.00	James Smith (Commercial fishing)	1.530	0.034	0.051	11/3/2010	Contra Costa
12MOY32	Marine	Engine repower	2	$ 103,010.00	Monterey Canyon Research Vessels, Inc	0.519	0.014	0.018	11/3/2010	San Francisco
12MOY43	Agriculture	Engine repower	2	$ 51,834.00	Boisset Family Estates	0.954	0.113	0.031	APCO	Napa
12MOY29	Off-road	Equipment replacement	1	$ 63,667.00	Daniel Sare (Farmer)	0.175	0.036	0.011	APCO	San Mateo
12MOY33	Off-road	Equipment replacement	1	$ 29,012.00	Eugene Poncia (Farmer)	0.093	0.017	0.004	APCO	Marin
12MOY44	Off-road	Equipment replacement	1	$ 23,032.00	Moretti Family Dairy	0.164	0.027	0.009	APCO	Marin
12MOY17	Agriculture	Engine repower	4	$ 44,696.00	Korbel Vineyards	0.237	0.029	0.008	APCO	Sonoma
12MOY36	Off-road	Equipment replacement	2	$ 382,265.00	Marin Sanitary Service	2.612	0.419	0.156	11/3/2010	Marin
12MOY31	Off-road	Equipment replacement	2	$ 138,276.00	Hillside Drilling Inc	1.419	0.202	0.065	11/3/2010	Contra Costa
12MOY34	Off-road	Equipment replacement	2	$ 148,861.00	Robert Giacomini Dairy, Inc	1.419	0.174	0.045	4/6/2011	Marin
12MOY42	Off-road	Equipment replacement	1	$ 194,615.00	DJNI Engineering	1.558	0.173	0.070	12/2/2010	Santa Clara
12MOY45	Off-road	Equipment replacement	1	$ 130,955.00	South Valley Mushroom Farm, Inc	0.603	0.100	0.023	12/2/2010	Santa Clara
12MOY41	Off-road	Equipment replacement	2	$ 46,321.00	DeBernardi Dairy Inc.	0.495	0.158	0.041	APCO	Sonoma
12MOY35	Off-road	Equipment replacement	1	$ 23,350.00	Spaletta Dairy	0.301	0.051	0.017	APCO	Sonoma
12MOY46	Off-road	Equipment replacement	2	$ 167,096.00	Sonoma Compost	1.496	0.204	0.049	12/2/2010	Sonoma
12MOY52	Off-road	Equipment replacement	1	$ 52,114.00	MCE Amos Inc (Dairy)	0.334	0.057	0.017	APCO	Sonoma
12MOY38	Off-road	Equipment replacement	1	$ 87,870.00	American Soil Products, Inc.	0.772	0.095	0.027	APCO	Alameda
12MOY54	Off-road	Equipment replacement	1	$ 43,248.00	Peter Marchi & Son Farm, Inc.	0.142	0.040	0.015	APCO	San Mateo
12MOY50	Off-road	Equipment replacement	1	$ 166,992.00	George Chiala Farms, Inc.	0.993	0.073	0.003	2/2/2011	Santa Clara

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	NOx (TPY)	ROG (TPY)	PM (TPY)	Board approval date	County
12MOY23	Off-road	Equipment replacement	1	$ 100,201.00	Bodega Farms	0.643	0.112	0.031	2/2/2011	Sonoma
12MOY62	Agriculture	Engine repower	1	$ 40,017.00	Herrick Grand III (farmer)	0.871	0.104	0.034	APCO	Napa
12MOY39	Marine	Engine repower	2	$ 77,592.00	Sundance Charters, LLC. (charter fishing)	0.393	0.013	0.013	APCO	Alameda
12MOY59	Off-road	Equipment replacement	1	$ 34,256.00	Henri Vandendriessche dba White Rock Vineyards	0.164	0.028	0.010	APCO	Napa
12MOY56	Marine	Engine repower	2	$ 185,322.00	Bass Tub Fishing (Charter fishing)	3.166	0.084	0.105	2/2/2011	San Francisco
12MOY49	Marine	Engine repower	2	$ 212,256.00	C-Gull Sportfishing, Inc. (Charter fishing)	2.037	-0.045	0.073	2/2/2011	Alameda
12MOY68	Off-road	Equipment replacement	1	$ 117,956.00	MC CALL DAIRY	0.492	0.084	0.025	2/2/2011	Sonoma
12MOY55	Off-road	Equipment replacement	1	$ 36,770.00	Alan Hynes Construction	0.314	0.067	0.020	APCO	Marin
12MOY65	Off-road	Equipment replacement	2	$ 79,953.00	Clos Du Val Wine Company, Ltd.	0.234	0.067	0.024	APCO	Napa
12MOY67	Off-road	Equipment replacement	5	$ 139,428.00	Hudson Vineyards LLC	0.618	0.114	0.039	4/6/2011	Napa
12MOY25	Off-road	Equipment replacement	1	$ 28,659.00	Bodega Farms	0.208	0.042	0.017	APCO	Napa
12MOY47	Off-road	Equipment replacement	1	$ 24,262.00	Albert Jr. and Victoria Mello dba Mello Dairy	0.224	0.040	0.011	APCO	Sonoma
12MOY71	Off-road	Equipment replacement	1	$ 34,794.00	Dutton Ranch corp.	0.134	0.040	0.014	APCO	Sonoma
12MOY64	Off-road	Equipment replacement	1	$ 31,495.00	Perry Kozlowski Ranch	0.150	0.029	0.012	APCO	Sonoma
12MOY72	Off-road	Equipment replacement	2	$ 151,763.00	RANKINS AG INC.	1.639	0.228	0.065	4/6/2011	Contra Costa
12MOY69	Off-road	Equipment replacement	1	$ 36,274.00	DSW Equipment Associates dba Cagwin & Dorward Landscape Contractors	0.031	0.001	0.001	APCO	Marin
12MOY81	Off-road	Equipment replacement	2	$ 146,630.00	Simoni & Massoni Farms	0.929	0.153	0.042	4/6/2011	Sonoma
12MOY84	Off-road	Equipment replacement	1	$ 103,678.00	Spaletta Ranch	1.207	0.152	0.042	4/6/2011	Sonoma
12MOY86	Off-road	Equipment replacement	1	$ 31,687.00	Point Reyes Vineyards	0.078	0.016	0.006	APCO	Marin
12MOY76	Off-road	Equipment replacement	1	$ 28,736.00	Dutton Ranch corp.	0.156	0.028	0.007	APCO	Sonoma
12MOY73	Off-road	Equipment replacement	1	$ 108,497.00	Stan Poncia dba Terrilinda Dairy	0.381	0.066	0.014	4/6/2011	Sonoma
12MOY74	Marine	Engine repower	4	$ 241,453.00	Golden Gate Scenic Steamship Corp.	3.024	-0.024	0.109	4/6/2011	San Francisco
12MOY83	Off-road	Equipment replacement	1	$ 117,957.00	Ielmorini Dairy	0.499	0.085	0.025	4/6/2011	Sonoma
12MOY75	Marine	Engine repower	4	$ 285,247.00	Golden Gate Scenic Steamship Corp.	3.352	-0.027	0.122	4/6/2011	San Francisco
12MOY89	Off-road	Equipment replacement	1	$ 125,560.00	George Bianchi Inc.	0.658	0.079	0.023	4/6/2011	Sonoma
12MOY80	Off-road	Equipment replacement	5	$ 179,718.00	Colinas Farming Company	0.517	0.105	0.043	Board	Napa
12MOY87	Off-road	Equipment replacement	2	$ 62,381.00	Martinelli Ranches	0.376	0.067	0.018	APCO	Sonoma
12MOY90	Off-road	Equipment replacement	1	$ 23,254.00	David Evans dba Marin Sun Farms, Inc.	0.021	0.037	0.007	APCO	Marin
12MOY93	Off-road	Equipment replacement	1	$ 28,394.00	Robert E. Hunter Jr. dba Hunter Farms	0.058	0.016	0.006	APCO	Sonoma
12MOY88	Off-road	Equipment replacement	4	$ 111,720.00	Dale Ricci dba Ricci Vineyards Carneros, Inc.	0.269	0.081	0.027	Board	Sonoma
12MOY82	Off-road	Equipment replacement	6	$ 190,056.00	Domaine Carneros Ltd. (Vineyard)	1.293	0.247	0.092	Board	Napa
12MOY95	Off-road	Equipment replacement	1	$ 112,978.00	Neil McIsaac & Son Inc. (Dairy)	0.726	0.123	0.037	Board	Sonoma
12MOY97	Off-road	Equipment replacement	1	$ 112,978.00	Albert and Teresa Moretti dba Moretti Dairy	0.639	0.108	0.032	Board	Sonoma
12MOY85	Off-road	Equipment replacement	2	$ 105,871.00	R. Rossi Co. / Fernando Muzzi (Farmer)	0.782	0.119	0.037	Board	San Mateo
12MOY102	Off-road	Equipment replacement	5	$ 176,436.00	Larry and Marsha Bettinelli dba Bettinelli Vineyard Management	0.747	0.179	0.077	Board	Napa
12MOY94	Off-road	Equipment replacement	2	$ 216,158.00	Andrew J. Poncia dba Poncia Fertilizer Spreading	3.203	0.372	0.123	Board	Sonoma
12MOY16	Marine	Engine repower	2	$ 138,000.00	Superfish charters (Charter fishing)	0.609	-0.021	0.022	Board	Alameda
12MOY112	Off-road	Equipment replacement	2	$ 245,592.00	Global Materials Recovery Services, Inc.	1.272	0.220	0.053	Board	Sonoma

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	NOx (TPY)	ROG (TPY)	PM (TPY)	Board approval date	County
12MOY127	Off-road	Equipment replacement	5	$ 192,899.00	Ferrari-Carano Vineyards & Winery, LLC	0.569	0.130	0.040	Board	Sonoma/ Napa
12MOY91	Marine	Engine repower	2	$ 63,080.00	Inspirtion Inc. (Commercial fishing)	0.273	0.007	0.010	APCO	San Francisco
12MOY136	Marine	Engine repower	1	$ 134,805.00	F/V Intrepid, Inc. (Commercial fishing)	0.881	0.015	0.026	Board	San Francisco
12MOY119	Off-road	Equipment replacement	2	$ 92,974.00	Ghiggeri and Stonebarger LLC (Farm)	0.347	0.071	0.023	APCO	Contra Costa
12MOY124	Off-road	Equipment replacement	3	$ 103,727.00	Richard's Grove & Saralee's Vineyard, Inc.	0.509	0.102	0.032	Board	Sonoma
12MOY138	Marine	Engine repower	4	$ 416,642.00	C & W DIVING SERVICES, INC.	7.637	-0.012	0.232	Board	Alameda
12MOY126	Off-road	Equipment replacement	1	$ 84,725.00	Shear Builders Inc.	0.317	0.060	0.021	APCO	Sonoma
12MOY141	Off-road	Equipment replacement	3	$ 223,348.00	McClelland's Dairy	1.424	0.223	0.079	Board	Sonoma
12MOY92	Marine	Engine repower	2	$ 127,474.00	Yachting Specalties, Inc. (Work boat)	0.563	-0.014	0.020	Board	Contra Costa
12MOY99	Marine	Engine repower	2	$ 148,510.00	Riverview Equipment Company LLC	2.167	-0.059	0.079	Board	Solano
12MOY145	Off-road	Engine repower	2	$ 201,339.00	Salt River Construction Corp.	5.392	0.554	0.198	Board	Contra Costa
12MOY144	Marine	Engine repower	1	$ 66,320.00	F/V ANNE B (Commercial fishing)	0.400	0.022	0.017	APCO	San Mateo
VIP2	VIP	Truck replacement	1	$ 35,000.00	C. Hill Trucking	0.366	0.014	0.658	APCO	Alameda
VIP7	VIP	Truck replacement	1	$ 35,000.00	David Bianchi Inc.	0.366	0.014	0.658	APCO	Sonoma
VIP10	VIP	Truck replacement	1	$ 35,000.00	Donald Lopez	0.366	0.014	0.658	APCO	Alameda
VIP11	VIP	Truck replacement	1	$ 35,000.00	Leyvas Transport	0.366	0.014	0.658	APCO	Monterey
VIP15	VIP	Truck replacement	1	$ 35,000.00	Maddocks Construction Inc.	0.366	0.014	0.658	APCO	Sonoma
VIP16	VIP	Truck replacement	1	$ 35,000.00	Northern Truck & Equipment	0.366	0.014	0.658	APCO	Alameda
VIP17	VIP	Truck replacement	1	$ 30,000.00	Chahal Trucking	0.294	0.008	0.265	APCO	Alameda
VIP18	VIP	Truck replacement	1	$ 30,000.00	Mann Transp	0.294	0.008	0.265	APCO	Alameda
VIP19	VIP	Truck replacement	1	$ 40,000.00	Farlain Trucking	0.354	0.014	0.032	APCO	Sonoma
VIP20	VIP	Truck replacement	1	$ 30,000.00	C & G Trucking	0.383	0.010	0.017	APCO	Stanislaus
VIP21	VIP	Truck replacement	1	$ 35,000.00	Arrow Trucking	0.442	0.012	0.020	APCO	Alameda
VIP22	VIP	Truck replacement	1	$ 35,000.00	VJ Trucking	0.305	0.012	0.027	APCO	Contra Costa
VIP23	VIP	Truck replacement	1	$ 35,000.00	Dhindsa Trucking	0.305	0.012	0.027	APCO	Alameda
VIP24	VIP	Truck replacement	1	$ 35,000.00	Trent McGrew Trucking	0.305	0.012	0.027	APCO	Shasta
VIP25	VIP	Truck replacement	1	$ 30,000.00	Berkeley Warehouse	0.466	0.005	0.013	APCO	Alameda
VIP27	VIP	Truck replacement	1	$ 30,000.00	GS Trucking	0.436	0.011	0.015	APCO	Alameda
VIP28	VIP	Truck replacement	1	$ 35,000.00	Mark Maxwell	0.305	0.012	0.027	APCO	Alameda
VIP29	VIP	Truck replacement	1	$ 45,000.00	JBV Trucking	0.649	0.016	0.022	APCO	Ventura
VIP31	VIP	Truck replacement	1	$ 45,000.00	Raymond A. Hobbs	0.570	0.020	0.052	APCO	Santa Clara
VIP32	VIP	Truck replacement	1	$ 45,000.00	Harjot Singh	0.649	0.016	0.022	APCO	Alameda
VIP33	VIP	Truck replacement	1	$ 45,000.00	John Whitney	0.390	0.015	0.035	APCO	Alameda
VIP34	VIP	Truck replacement	1	$ 45,000.00	James A. King	0.579	0.015	0.026	APCO	Merced
VIP36	VIP	Truck replacement	1	$ 45,000.00	Fourway Trucking, Inc.	0.510	0.013	0.017	APCO	Alameda
VIP37	VIP	Truck replacement	1	$ 45,000.00	Jasmer Singh/Surjit Kaur	0.649	0.016	0.022	APCO	Santa Cruz
VIP38	VIP	Truck replacement	1	$ 35,000.00	Rupinderjit Singh Basra	0.640	0.020	0.029	APCO	Santa Clara
VIP39	VIP	Truck replacement	1	$ 45,000.00	Melanio G. Maningas	0.970	0.019	0.022	APCO	Contra Costa
VIP40	VIP	Truck replacement	1	$ 25,000.00	Melvyn Ortiz	0.470	0.010	0.021	APCO	Contra Costa
112 Projects			192	$10,374,288.00		92.6	8.4	8.4		

Figure 1: CMP/ MSIF Funding Distribution by Equipment Category as of 4/14/11

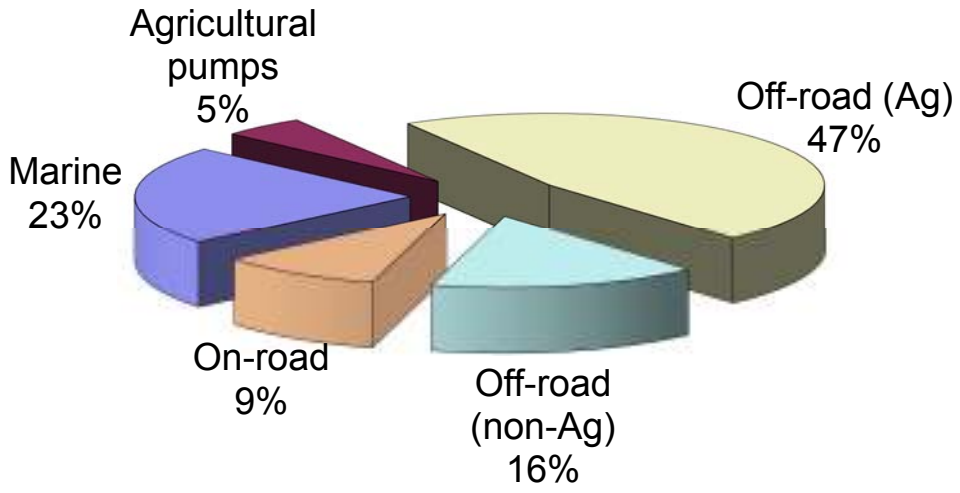
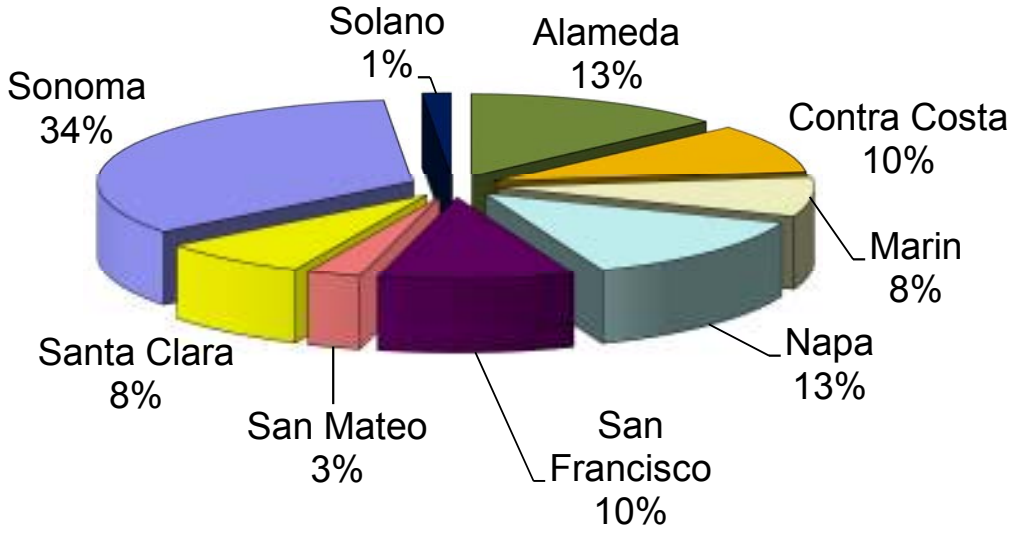


Figure 2: CMP/ MSIF Funding Distribution by County as of 4/14/11



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: April 19, 2010

Re: Consideration of Approximately $20 Million in California Goods Movement Bond (I-Bond) Funding for Bay Area Ports

RECOMMENDATIONS:

Recommend Board of Directors:

1. Approve the proposed and alternate I-Bond shore power projects.
2. Authorize the Executive Officer/APCO to enter into agreements for the proposed projects.

BACKGROUND

On December 16, 2010, the Air District executed an agreement with the California Air Resources Board (CARB) to accept $20 million in Goods Movement Bond Funding (I-Bond) for shore power projects at Bay Area ports. In order to expend the $20 million in I-Bond funding, the Air District opened a solicitation for projects on February 1, 2011. Applications were accepted until March 15, 2011. Staff notified the Executive Officers and Directors of all Bay Area ports, shipping lines and terminals of the availability of funding via registered mail. Staff also hosted a workshop on February 18, 2011, to answer questions and provide guidance for those interested in applying for funding.

DISCUSSION

The Air District received two applications for shore power projects at ten berths at the Port of Oakland. The Port of Oakland submitted one application for seven berths and two alternate berths and Ports America (a private terminal) submitted an application for one berth at their Oakland facility. Alternate berths are allowed under the I-Bond guidelines to be submitted as back-up projects in the event that primary projects are not able to be completed or if additional funds should become available. As part of the competitive solicitation, staff ranked projects on emissions reduced on a berth-by-berth basis in two categories, primary and alternate berths. That ranking process resulted in eight berths being recommended for funding (Table 1), and two berths being recommended as alternate projects (Table 2). All of the projects are scheduled to be completed between August and December of 2013.

Table 1: I-Bond Shore Power Project Recommendations

Berth #	Applicant	Terminal Operator	Proposed Funding Amount	Emission Reductions (lbs[1])		2010 vessel visits	Cost-effectiveness (lb/$)
				PM	NOx		
68	Port of Oakland	SSAT/ Howard Terminal	$2,500,000	16,596	972,342	74	0.522
55	Port of Oakland	TTI	$2,500,000	15,844	928,315	186	0.498
35	Port of Oakland	Evergreen/ Ben E. Nutter Terminal	$2,500,000	14,103	826,263	136	0.443
30	Port of Oakland	TraPac	$2,500,000	14,095	825,830	140	0.443
24	Ports America	Ports America/ Outer Harbor	$2,500,000	13,475	789,511	130	0.424
59	Port of Oakland	SSAT/ Oak Intern. Container Terminal	$2,500,000	12,427	728,076	138	0.391
32	Port of Oakland	TraPac	$2,500,000	5,972	349,918	61	0.188
37	Port of Oakland	Evergreen/ Ben E. Nutter Terminal	$1,917,476	4,087	239,430	46	0.128
Totals [2]			**$19,417,476**	**95,599**	**5,659,685**	**911**	

[1] Emission reductions over the life of the projects
[2] $582,524 of the $20 million allocation is for Air District administrative costs

Table 2: I-Bond Alternate Shore Power Projects

Berth #	Applicant	Terminal Operator	Eligible Funding Amount	Emission Reductions (lbs)		2010 vessel visits	Cost-effectiveness (lb/$)
				PM	NOx		
25	Port of Oakland	Ports America	$2,500,000	10,548	618,005	120	0.332
67	Port of Oakland	SSAT/ Howard Terminal	$2,500,000	723	42,342	6	0.023
Totals			**$5,000,000**	**11,271**	**660,347**	**126**	

Upon approval by the Board of Directors, funded projects will have to comply with a number of requirements during the project implementation period, and for ten years after the equipment is operational. The list below describes some of the major requirements for these projects.

- Each contract shall require the grantee to achieve surplus emissions reductions by plugging in 10% more vessels than required by the shore power regulation (see Table 3):

Table 3: I-Bond Plug-In Rates vs. Regulatory Requirements

Date	Regulatory Requirement	I-Bond Requirement
Jan 1, 2014	50% of vessels	60% of vessels
Jan 1, 2017	70% of vessels	80% of vessels
Jan 1, 2020	80% of vessels	90% of vessels

- Grant recipients must demonstrate their financial ability to match the available grant funding to complete shore power projects within the timeframe of the I-Bond program.
- Each grant agreement shall include project milestones with specific completion dates.
- Each grantee is required to provide quarterly reports on adherence to the project schedule. This report includes: actual start and finish dates of activities, estimated completion dates of project elements and a listing of dates that may jeopardize the on-time completion of the project.
- In the event that any milestone dates are not reached, the grantee has the option to either forfeit grant funding or submit a schedule recovery plan.
- CARB and the Air District will determine whether the recovery plan meets the requirements of the I-Bond guidelines and whether or not funding will be forfeit due to the fact that the project cannot recover in time to meet the expenditure deadlines.
- Upon approval by the Air District and CARB, projects not fully operational by December 31, 2013 may be eligible for a project extension of up to 1 year, but will have their funding award reduced by 10%.
- All contracts shall contain a nonperformance clause. In the event that the grantee fails to meet the plug-in requirement of the I-Bond contract, they will be penalized 1% of the funding invested for every 1% of nonperformance up to 10%.

In the event that any funds are forfeited under this program, CARB will require the Air District to reinvest them in on-road trucks as part of its projected Year 3 I-Bond expenditure plan.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. The Air District receives funding for the administration of incentives under the I-Bond program.

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: April 19, 2011

Re: Consideration of Air District Participation in Lawn and Garden Equipment Replacement Project and Allocation of $182,025 in Matching Funds

RECOMMENDED ACTION:

Recommend the Board of Directors:

1. Adopt a resolution authorizing the Executive Officer/APCO to accept a grant from the California Air Resources Board (CARB) of up to $182,025 and committing the Air District to comply with the Lawn and Garden Equipment (LGER) Replacement Project requirements, and allocating up to $182,025 in Mobile Source Incentive Funding (MSIF) as matching funds.

2. Authorize the Executive Officer/APCO to execute all necessary agreements with the CARB relating to the Air District's receipt of LGER Project funds for FYE 2011.

BACKGROUND

On December 2, 2010, the Air District applied to the CARB for a grant to implement a LGER Project. This grant opportunity was part of the Air Quality Improvement Program (AQIP) authorized under Assembly Bill (AB) 118 (Nuñez, 2007). On December 22, 2010, CARB notified staff of its intent to provide a grant award of $182,025 to the Air District.

The LGER Project guidelines require one-to-one matching funds. In its application, the Air District proposed using MSIF as matching funds, once CARB included LGER projects in the Carl Moyer Program (CMP) Guidelines. This inclusion is necessary to enable the use of MSIF funds for LGER projects and is expected to receive CARB approval on April 28, 2011.

DISCUSSION

Should the Board of Directors choose to accept this award, staff would launch the LGER Project in the fall of 2011. As part of this project, the Air District will provide extensive outreach to ensure widespread public awareness and full use of all available discounts. To participate, residents will turn in an operable gasoline-powered lawn mower at one of a number of locations and receive a discount on a new cordless electric mower. Staff

plans to contract with a company selected via a Request for Proposal process to: accept the used mowers; provide the discount; and process the sale of the new cordless mower on a first-come, first-served basis. The final amount of the discount on the purchase price of the new mowers will be $145, based on the price cap imposed by the CMP guidelines. Staff estimates that the LGER Project will replace approximately 2000 lawnmowers district-wide.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. Through the LGER Project and MSIF, the Air District distributes "pass-through" funds on a reimbursement basis. Administrative costs of up to 9% of the AQIP funds awarded to the Air District will be used for related administrative expenses.

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: April 19, 2011

Re: Consideration of Transportation Fund for Clean Air (TFCA) County Program Manager Expenditure Plans for Fiscal Year Ending (FYE) 2012, and Allocation of FYE 2008 TFCA Funds to the Napa County Program Manager

RECOMMENDED ACTIONS:

Recommend Board of Directors:

1. Approve the allocation of FYE 2012 TFCA County Program Manager Funds listed on Table 1.
2. Authorize the Executive Officer/APCO to enter into funding agreements with the County Program Managers (CPM) for the total funds to be programmed in FYE 2012, listed on Table 1, consistent with the Board-adopted TFCA Program Manager Fund Policies.
3. Approve the allocation of $68,020.50 in remaining FYE 2008 funds to the Napa County Transportation and Planning Agency, and authorize the Executive Officer/APCO to amend the funding agreement with the agency to include the additional allocation.

BACKGROUND

Pursuant to California Health and Safety Code Sections 44241 and 44242, 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 and mobile source control measures contained in the Clean Air Plan. By law, the Air District provides forty percent 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 designates a 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 the FYE 2012 TFCA County Program Manager Fund Policies, which were adopted by the Air District's Board of Directors on December 1, 2010. In FYE 2008, the Program Manager for Napa County was not able to allocate all of its CPM funds to eligible projects. Pursuant to the TFCA-enabling legislation, which requires CPM funds to be allocated within six months, the Air District withheld approximately $68,000.

DISCUSSION

The Air District issued the TFCA FYE 2012 Program Manager Expenditure Plan Application Guidance to CPMs on December 22, 2010. The deadline for applications was March 31, 2011, 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 FYE 2012 TFCA CPM funding available for allocation. This estimate is based on annual receipts for that county from the Department of Motor Vehicles. The third column in the table lists the total funding available for programming in each county for FYE 2012. This amount includes interest earned and any funds available for reprogramming from projects that were completed under budget or canceled in the previous fiscal year.

Table 1: Estimated Funding for CMPs for FYE 2012

County Program Manager	Est. New FYE 2012 TFCA Funds	Total Funds to be Programmed in FYE 2012 (New Funds + Interest + Reprogrammed Funds)
Alameda County Congestion Mgt. Agency	$1,754,911	$1,927,591.72
Contra Costa Transportation Authority	$1,278,554	$1,310,904.34
Transportation Authority of Marin	$335,635	$398,527.09
Napa County Transportation Planning Agency	$180,357	$238,907.42
San Francisco County Transportation Authority	$686,946	$1,080,142.45
San Mateo City/County Association of Gov'ts	$976,283	$987,566.04
Santa Clara Valley Transportation Agency	$2,148,196	$2,302,585.80
Solano Transportation Authority	$291,092	$294,747.25
Sonoma County Transportation Authority	$551,523	$558,598.93

Regarding the remaining FYE 2008 CPM funds, the Program Manager for Napa County was unable to identify projects to receive this funding until now and as such these monies had been unallocated by the Board of Directors. Based on the fact there are now sufficient projects to expend this funding, staff is recommending the allocation of these funds.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

None. TFCA County Program Manager Fund revenues are generated from a dedicated outside funding source and are passed through to CPMs.

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 Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 19 2011

Re: Public Hearing to Consider Adoption of Proposed Amendments to Air District Regulation 3: Fees, and Approval of Notice of Exemption from California Environmental Quality Act (CEQA)

RECOMMENDED ACTION:

Recommend Board of Directors:

(1) Adopt proposed amendments to Air District Regulation 3: Fees, with an effective date of July 1, 2011, with the exception of proposed amendments to Fee Schedules L, Q, R, and S (for which a second public hearing is required prior to adoption, and which has been scheduled for June 15, 2011);
(2) Receive testimony on proposed amendments to Fee Schedules L, Q, R, and S; and
(3) Approve the filing of a Notice of Exemption from CEQA for amendments to Regulation 3: Fees, with the exception of proposed amendments to Fee Schedules L, Q, R, and S.

BACKGROUND

Staff develops amendments to the Air District's fee regulation as a part of the budget preparation process. Over the five year period Fiscal Years Ending (FYE) 2006 – 2010, fees were increased by an average of approximately 9 percent. These fee increases were adopted to meet budgetary needs so that the Air District could continue to effectively implement and enforce its regulatory programs, and to gradually move toward more complete recovery of the costs of these program activities. For the current FYE 2011, the Air District scaled back its cost recovery efforts, in recognition of the impacts of the economic downturn on fee-payers, and adopted an overall fee increase of 5.5 percent (5 percent increase for all fees, except the Title V fee schedule, which was increased by 10 percent).

In September 2010, the Air District contracted with Matrix Consulting Group to complete an updated Cost Recovery and Containment Study. This study has recently been completed, and indicates that fee revenue remains well below the point of full cost recovery (62 percent, on an overall basis for FYE 2010). The contractor presented the study to the Budget and Finance Committee at their meeting on March 23, 2011, and a copy of the study has also been enclosed with this memorandum.

DISCUSSION

Review of fee revenue received in the current fiscal year to date indicates that actual fee revenue is tracking below budgeted projections by approximately 4 percent which, if extrapolated to the end of the fiscal year, would represent a shortfall of $1.2 million. This decrease in fee revenue is caused primarily by a greater than expected reduction in permit applications submitted, particularly for projects involving large capital outlays, and a reduction in reported business activity and emissions levels, upon which some fees are based. Staff believes that it is appropriate for budgeting purposes to assume that fees related to facility activity levels will not significantly rebound in FYE 2012. There are several reasons for this including: (1) even though the Bay Area is experiencing a cyclical economic rebound, there are downside risks that could slow the recovery (e.g., if energy and food prices remain elevated and/or job creation is slowed by layoffs in the public sector), (2) facility permit renewal fees are based on activity levels from the preceding year, so there is a time lag between when increased activity levels occur and when increased fee revenue is received, (3) some of the recent decreases in emissions-based fees are due to permanent decreases in emissions resulting from regulatory requirements, (4) permit applications for major new power plants have historically been a major contributor to permit application fee revenue, but no such applications are expected to be submitted in FYE 2012 as four new major power plants have been permitted (or are in the final stages of being permitting) in the Bay Area in the last year, and a permit application for a fifth proposed plant has already been submitted with permit fees paid. If facility activity-based fee revenue should rebound in FYE 2012 beyond current expectations, this can be taken into consideration in developing fee amendments for the FYE 2013 budget cycle.

Staff has prepared draft fee amendments that would increase overall fee revenue by approximately 5 percent, or $1.54 million, from current budgeted levels. Based on the current shortfall between budgeted and actual fee revenue, and the assumption that fees related to business activity will remain at current levels through the next fiscal year, fee rates will need to be increased by an average of 10 percent to reach this revenue target. With these fee increases, and with rigorous cost containment measures included in the proposed FYE 2012 budget, modest use of reserve accounts is still expected to be needed. With no fee increases, much more significant use of reserves would be required and reserve funds would likely drop below minimum levels established by the Board of Directors as being appropriate (i.e., 15 percent of the General Fund budget).

Staff has developed the proposed fee amendments based on the results of the 2011 Cost Recovery and Containment Study. Existing fee schedules would be amended as follows:

(1) no change for fee schedules that are recovering greater than 89% of costs;

(2) a 2% cost of living increase in registration fees (all of which have been established in recent years based on considerations of cost recovery);

(3) a 10% increase in:
(a) fee schedules that are recovering 70 – 89% of costs, and

(b) other administrative fees such as permit application filing fees;

(4) a 12% increase in fee schedules that are recovering 50 – 69% of costs; and

(5) a 14% increase in fee schedules that are recovering less than 50% of costs.

An additional new fee is proposed for registered diesel engines that elect to comply under an Alternative Compliance Plan (ACP). An ACP provision is being developed into a new Air District rule covering low-use agricultural diesel engines. The proposed one-time fee for an engine covered under an ACP would be $129.

The Staff Report that is enclosed with this memorandum provides additional details regarding the proposed fee amendments.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

The proposed fee amendments are expected to increase fee revenue in FYE 2012 by approximately 5 percent from FYE 2011 budgeted levels, or $1.54 million. This revenue has been included in the proposed FYE 2012 budget. Even with these fee increases, the proposed budget includes a transfer of approximately $900,000 from reserve funds.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian Bateman
Reveiwed by: Jeffrey McKay

Enclosure(s)

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

STAFF REPORT

PROPOSED AMENDMENTS TO BAAQMD REGULATION 3: FEES

APRIL 20, 2011

1. EXECUTIVE SUMMARY

District staff has prepared proposed amendments to District Regulation 3: Fees, for Fiscal Year Ending (FYE) 2012 (i.e., July 1, 2011 to June 30, 2012) that would increase revenue to enable the District to continue to effectively implement and enforce regulatory programs for stationary sources of air pollution. A recently completed 2011 Cost Recovery and Containment Study (a copy of which is available on request) indicates that a significant cost recovery gap exists. For the most recently completed fiscal year (FYE 2010), fee revenue recovered just 62 percent of program activity costs.

Reducing the cost recovery gap has become a particularly important part of the District's budgetary needs as County revenue derived from property taxes is projected to remain flat or decline over the next several years. The District will also continue to implement cost containment measures to address budgetary issues associated with the general economic downturn. Even with the proposed fee increases and cost containment measures, the District will likely need to make use of its reserves in FYE 2012 (as it has in FYE 2011). With no fee increases, much more significant use of reserves would be required and reserve funds would likely drop below minimum levels established by the District's Board of Directors as being appropriate (i.e., 15 percent of the General Fund budget, or approximately $9 million).

District staff is proposing fee amendments that are expected to increase fee revenue in FYE 2012 by 5 percent from fee revenue projections included in the current FYE 2011 budget. Assuming that facility activity-based fees continue through FYE 2012 at the depressed levels observed to date in FYE 2011 (reflected in a drop off in permit applications for major new projects, and a decrease in reported production levels and emissions), the average fee rates in Regulation 3 will need to be increased by 10 percent in order to meet this fee revenue target.

The results of the 2011 Cost Recovery and Containment Study were used to establish proposed fee amendments for each fee schedule based on the degree to which existing fee revenue recovers the regulatory program activity costs associated with the schedule. Based on this approach, the fee rates in several fee schedules would not be increased, while other fee schedules would be increased by 10, 12, or 14 percent. Several fees that are administrative in nature (e.g., permit application filing fees and permit renewal processing fees) would be increased by 10 percent. The fees for equipment registrations, which have been established in recent years based on considerations of cost recovery, would be increased by a cost of living adjustment of 2 percent. Finally, a new one-time fee of $129 would be set for each low-use agricultural engine that complies with emissions standards through an Alternative Compliance Plan.

The proposed fee amendments would increase annual permit renewal fees for most small businesses that require District permits by about $50 or less, with the exception of gas stations which would increase by an average of about $230. For larger facilities, increases in annual permit renewal fees would cover a considerable range due to differences in the facility's size, complexity, and type of emission sources. The annual

permit renewal fees for the five Bay Area refineries, the District's highest fee payers, would increase within an estimated range of 4.4 to 7.0 percent ($64,000 to $153,500), with the average increase being 5.7 percent ($98,000). For facilities with Title V permits, not including the five refineries, annual permit fees would increase within an estimated range of 0.8 to 13.8 percent ($190 to $20,400), with the average increase being 8.9 percent ($4,500). District permit fees would remain well below those of the South Coast AQMD, where fee revenue recovers a much higher percentage of associated program activity costs (i.e., about 90 percent) relative to the Bay Area AQMD.

The proposed fee amendments would increase overall District fee revenue in FYE 2012 to approximately $32.3 million, representing an increase of $1.5 million from budgeted fee revenue levels for FYE 2011. These revenue projections have been included in the proposed FYE 2012 budget prepared by District staff.

2. BACKGROUND

State law authorizes the District to assess fees to generate revenue to recover the reasonable cost of regulatory program activities for stationary sources of air pollution. The largest portion of District fees is collected under provisions that allow the District to impose permit fees sufficient to recover the costs of program activities related to permitted sources. The District is also authorized to assess fees for: (1) areawide or indirect sources of emissions which are regulated, but for which permits are not issued by the District, (2) sources subject to the requirements of the State Air Toxics Hot Spots Program (Assembly Bill 2588), and (3) activities related to the District's Hearing Board involving variances or appeals from District decisions on the issuance of permits. The District has established, and regularly updates, a fee regulation (District Regulation 3: Fees) under these authorities.

The District has analyzed whether fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the costs of related program activities. In 1999, a comprehensive review of the District's fee structure and revenue was completed by the firm KPMG Peat Marwick LLP (*Bay Area Air Quality Management District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs,* KPMG Peat Marwick LLP, February 16, 1999). This 1999 Cost Recovery Study indicated that fee revenue did not nearly offset the full costs of program activities associated with sources subject to fees as authorized by State law. Property tax revenue (and in some years, reserve funds) had been used to close this cost recovery gap.

The District Board of Directors adopted an across-the-board fee increase of 15 percent, the maximum allowed by State law for permit fees, for FYE 2000 as a step toward more complete cost recovery. The District also implemented a detailed employee time accounting system to improve the ability to track costs by program activities moving forward. In each of the next five years, the District adjusted fees only to account for inflation (with the exception of FYE 2005, in which the District also approved further

increases in Title V permit fees and a new permit renewal processing fee).

In 2004, the District funded an updated Cost Recovery Study. The accounting firm Stonefield Josephson, Inc. completed this study in March 2005 (*Bay Area Air Quality Management District Cost Recovery Study, Final Report*, Stonefield Josephson, Inc., March 30, 2005). This 2005 Cost Recovery Study indicated that a significant cost recovery gap continued to exist. The study also provided cost recovery results at the level of each individual fee schedule based on detailed time accounting data. Finally, the contractor provided a model that could be used by District staff to update the analysis of cost recovery on an annual basis using a consistent methodology.

For the five years following the completion of the 2005 Cost Recovery Study (i.e., FYE 2006 through 2010), the District adopted fee amendments that increased overall projected fee revenue by an average of 8.9 percent per year. In order to address fee equity issues, the various fees were not all increased in a uniform manner. Rather, individual fee schedules were amended based on the magnitude of the cost recovery gap for that schedule, with the schedules with the more significant cost recovery gaps receiving more significant fee increases. In FYE 2009, the District's fee amendments also included a new greenhouse gas (GHG) fee schedule. The GHG fee schedule recovers costs from stationary source activities related to the District's Climate Protection Program. In FYE 2011, the District adopted an across-the-board 5 percent fee increase, except for the Title V fee schedule (Schedule P) which was increased by 10 percent (the District's 2010 Cost Recovery Study indicated that Fee Schedule P recovered only 46 percent of program activity costs).

In September 2010, the District contracted with the firm Matrix Consulting Group to complete an updated analysis of cost recovery that could be used in developing fee amendments for FYE 2012 and beyond. This study also included a review of the District's current cost containment strategies, and provided recommendations to improve the management of the District's costs and the quality of services provided to stakeholders. A four-member Stakeholder Advisory Group was assembled to help prepare the study and provided input on: (1) Development of a Request for Proposals, (2) contractor selection, (3) the quality of services provided by the District to stakeholders, and (4) review of the draft study. The study was completed in March 2011 (*Cost Recovery and Containment Study, Bay Area Air Quality Management District*, Final Report, Matrix Consulting Group, March 9, 2011).

The recently completed 2011 Cost Recovery and Containment Study concluded that, for the District's most recently completed FYE 2010, overall fee revenue recovered 62 percent of related program activity costs. The study also noted that the District has implemented a number of strategies over the past several years in order to contain its costs. In addition, the District's permit and enforcement programs were assessed against a series of performance measures know as Best Management Practices. Most of the Best Management Practices identified in the study are either already being applied at the District, or are being developed for future implementation.

The 2011 Cost Recovery and Containment Study provided cost recovery results at the level of each individual fee schedule for use in considering appropriate fee amendments. In addition, the contractor provided an updated model that could be used by District staff in subsequent years to update the analysis of cost recovery using a consistent methodology.

3. PROPOSED FEE AMENDMENTS FOR FYE 2012

3.1 SUMMARY OF METHODOLOGY

For FYE 2012, District staff has developed proposed amendments to Regulation 3 that would increase fee revenue by approximately 5 percent, or $1.5 million, from budgeted fee revenue levels for the current FYE 2011. This represents an overall fee revenue target of approximately $32.3 million. Projected fee revenue for FYE 2012 is provided in Table 1 in several categories. These figures are approximations, as actual fee revenue depends on a variety of factors, some of which are difficult to predict (e.g., year-to-year fluctuations in industrial activities).

Table 1. Projected Fee Revenue for FYE 2012

Permit Fees	
New & Modified Permit Fees, Permit to Operate Renewal Fees, Title V Fees	$29,050,000
AB 2588 Fees (includes State pass-through)	$724,000
Other Fees	
Asbestos and Soil Excavation Notification Fees	$1,771,000
Registration Fees (includes an estimated $350,000 in PERP fees from CARB)	$780,000
Hearing Board Fees	$20,000
Total	$32,345,000

The $32.3 million fee revenue target summarized in Table 1 was developed as a part of the District's FYE 2012 budget preparation process. The proposed FYE 2012 budget assumes that County revenue (the District's second largest revenue source, which is used to fill the cost recovery gap resulting from fee-based program activities) will not increase from FYE 2011, reflecting the continuing downturn in the economy. The proposed budget also includes a number of cost containment measures, including adding no new positions and maintaining the District's existing vacancy rate of over 10 percent. The total General Fund budget expenditures proposed for FYE 2012 represents a decrease of approximately 2 percent from the amended FYE 2011 budget.

The proposed FYE 2012 budget is balanced with the inclusion of a transfer of approximately $0.9 million from the District's reserve funds. The proposed 5 percent increase in fee revenue is needed to keep the District's reserves from being reduced in FYE 2012 below the minimum level that the District's Board of Directors has established as being appropriate (i.e., 15 percent of the General Fund budget, or approximately $9 million, representing about three months of operating expenditures).

In order to meet the $32.3 million fee revenue target included in the proposed FYE 2012 budget, District staff estimates that the fee rates in Regulation 3 will need to be increased by an average of 10 percent. This assumes that facility activity level-based fees will continue through FYE 2012 at the depressed levels observed to date in FYE 2011. In FYE 2011, there has been a decrease in the number of permit applications submitted for projects involving major capital expenditures, as well as a decrease in reported facility throughput levels and emissions. District staff is projecting that actual fee revenue for FYE 2011 will be approximately 96 percent of budgeted levels, representing a shortfall of $1.2 million.

District staff believes that it is appropriate for budgeting purposes to assume that fees related to facility activity levels will not significantly rebound in FYE 2012. There are several reasons for this including: (1) Even though the Bay Area is experiencing a cyclical economic rebound, there are downside risks that could slow the recovery (e.g., if energy and food prices remain elevated and/or job creation is slowed by layoffs in the public sector), (2) facility permit renewal fees are based on activity levels from the preceding year, so there is a time lag between when increased activity levels occur and when increased fee revenue is received, (3) some of the recent decreases in emissions-based fees are due to permanent decreases in emissions resulting from regulatory requirements, (4) permit applications for major new power plants have historically been a major contributor to permit application fee revenue, but no such applications are expected to be submitted in FYE 2012 as four new major power plants have been permitted (or are in the final stages of being permitting) in the Bay Area in the last year, and a permit application for a fifth proposed plant has already been submitted with permit fees paid. If facility activity-based fee revenue should rebound in FYE 2012 beyond current expectations, this can be taken into consideration in developing fee amendments for the FYE 2013 budget cycle.

The results of the 2011 Cost Recovery and Containment Study were used to establish proposed fee amendments for most fee schedules based on the degree to which existing fee revenue recovers the activity costs associated with the schedule. Based on this approach, the fee rates in several fee schedules would not be increased, while the fee rates in other fee schedules would be increased by 10, 12, or 14 percent. The specific basis for these proposed fee amendments is summarized in Table 2 as follows.

Table 2. Proposed Fee Changes Based on Cost Recovery by Fee Schedule

Revenue from Fee Schedule as a Percentage of Program Activity Costs (from 2011 Cost Recovery and Containment Study)	Change in Fees	Affected Fee Schedules
Revenue exceeds 89% of costs	No Change	C, G-4, T
Revenue is 70 to 89% of costs	10% increase	B, F, G-5, N
Revenue is 50 to 69% of costs	12% increase	G-1, L
Revenue is less than 50% of costs	14% increase	A, D, E, G-2, G-3, H, I, K, P, S

For several existing fee schedules not listed in Table 2 (i.e., Schedules M, R, Q, and U), the methodology of using recent cost recovery data for establishing fee amendments was considered inappropriate. The proposed amendments to these fee schedules are explained in the following section.

In addition to the proposed amendments to fee schedules, District staff is proposing to increase several add-on fees that appear in the Standards section of Regulation 3 by 10 percent. This includes permit application filing fees and permit renewal processing fees. Existing permit fees are well below the point of full cost recovery, and these fee increases are proposed to help the District reduce its cost recovery gap.

3.2 PROPOSED RULE AMENDMENTS

The complete text of the proposed changes to District Regulation 3: Fees, has been prepared in strikethrough (deletion of existing text) and underline (new text) format, and is included in Appendix A. A detailed description of the proposed amendments follows.

- Section 3-225: Minor Modification

The definition of “minor modification” would be amended to include reference to Schedule G-5, which was inadvertently omitted from this definition when Schedule G-5 was adopted in 2007. The term “minor modification” is used in subsection 3-302.5, and this subsection already specifies that minor modifications to permitted sources subject to Schedule G-5 shall pay fees under Schedule G-2.

- Section 3-302: Fees for New and Modified Sources

The proposed amendment for Section 3-302 is a 10 percent increase in the filing fee for permit applications for new/modified sources and abatement devices (subsection 3-302.3) (rounded to the nearest whole dollar), from $354 to $389.

- Section 3-311: Banking

The proposed amendment for Section 3-311 is a 10 percent increase in the filing fee for banking applications (rounded to the nearest whole dollar), from $354 to $389.

- Section 3-312: Emission Caps and Alternative Compliance Plans

No change in regulatory language is proposed for subsection 3-312.1, which requires an additional annual fee equal to 15 percent of the facility's Permit to Operate fee for facilities that elect to use an Alternative Compliance Plan (ACP) for compliance with Regulation 8, or Regulation 2, Rule 2. These ACP fees would change along with the proposed changes in Permit to Operate renewal fees listed in Table 2 for sources in Schedules B, C, D, E, F, G-1, G-2, G-3, G-4, G-5, H, I, and K.

The proposed amendment for subsection 3-312.2 is a 10 percent increase in the annual fee (rounded to the nearest whole dollar) for a facility that elects to use an ACP contained in Regulation 2, Rule 9: Interchangeable Emission Reduction Credits. The fee for each source included in the ACP would be increased from $893 to $982, and the maximum fee would be increased from to $8,934 to $9,827.

- Section 3-320: Toxic Inventory Fees

The maximum toxic inventory fee for a small business specified in subsection 3-320.1 would be increased by 10 percent (rounded to the nearest whole dollar) from $8,131 to $8,944. This fee is related to Schedule N: Toxic Inventory Fees, which would be increased by 10 percent based on the cost recovery methodology listed in Table 2.

- Section 3-327: Permit to Operate, Renewal Fees

The processing fees for renewal of Permits to Operate specified in subsections 3-327.1 through 3-327.6 would be increased by 10 percent (rounded to the nearest whole dollar).

- Section 3-329: Fee for Risk Screening

No change in regulatory language is proposed for Section 3-329: Fee for Risk Screening. Increases in risk screening fees are instead specified in Schedules B, C, D, E, F, G-1, G-2, G-3, G-4, G-5, H, I, and K. For each applicable fee schedule, the base fee for each application that requires a Health Risk Screening Analysis would be increased by 10 percent from $354 to $389. The portion of the risk screening fee that is based on the type of source involved would be changed along with the proposed changes in Permit to Operate renewal fees listed in Table 2 for sources in Schedules B, C, D, E, F, G-1, G-2, G-3, G-4, G-5, H, I, and K.

- Fee Schedules

Schedule A: Hearing Board Fees

Based on the cost recovery methodology listed in Table 2, the fees in Schedule A would be increased by 14 percent (rounded to the nearest whole dollar). The schedules of fees for excess emissions (Schedule A: Table I) and visible emissions (Schedule A: Table II) would also be increased by 14 percent.

Based on a request from the District's Hearing Board, District staff is also proposing to amend an existing provision in Schedule A for excusing fees based on unreasonable hardship. Specifically, the footnote at the end of the table of fees would be amended to specify that a hardship fee waiver must be requested pursuant to Hearing Board Rules. The existing provision indicates that the Hearing Board may grant an order for a fee waiver based on hardship, without any reference to Hearing Board Rules. California Health and Safety Code section 42311(h) indicates that an air district's hearing board may waive all or part of its fees if it determines that the circumstances warrant a waiver.

Schedule B: Combustion of Fuel

Based on the cost recovery methodology listed in Table 2, the fees in Schedule B would be increased by 10 percent (rounded to the nearest whole dollar). The base fee for a health risk screening analysis for a source covered by Schedule B would also be increased by 10 percent, from $354 to $389.

Schedule C: Stationary Containers for the Storage of Organic Liquids

Based on the cost recovery methodology listed in Table 2, the fees in Schedule C would not be changed, except for the base fee for a health risk screening analysis for a source covered by Schedule C, which would be increased by 10 percent from $354 to $389.

Schedule D: Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals

Based on the cost recovery methodology listed in Table 2, the fees in Schedule D would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule D, which would be increased by 10 percent from $354 to $389. For bulk plants, terminals or other facilities subject to Schedule D, Part B., the base fee for a health risk screening analysis is included in the Risk Screening Fee (RSF) for the first TAC source in the application.

Schedule E: Solvent Evaporating Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule E would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule E, which would be increased by 10 percent from $354

to $389.

Schedule F: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule F would be increased by 10 percent. The base fee for a health risk screening analysis for a source covered by Schedule F would also be increased by 10 percent, from $354 to $389. The base fee for a health risk screening analysis in Schedule F is included in the RSF for the first TAC source in the application.

Schedule G-1: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule G-1 would be increased by 12 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-1, which would be increased by 10 percent from $354 to $389. The base fee for a health risk screening analysis in Schedule G-1 is included in the RSF for the first TAC source in the application.

Schedule G-2: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule G-2 would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-2, which would be increased by 10 percent from $354 to $389. The base fee for a health risk screening analysis in Schedule G-2 is included in the RSF for the first TAC source in the application.

Schedule G-3: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule G-3 would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-3, which would be increased by 10 percent from $354 to $389. The base fee for a health risk screening analysis in Schedule G-3 is included in the RSF for the first TAC source in the application.

Schedule G-4: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule G-4 would not be changed, except for the base fee for a health risk screening analysis for a source covered by Schedule G-4, which would be increased by 10 percent from $354 to $389. The base fee for a health risk screening analysis in Schedule G-4 is included in the RSF for the first TAC source in the application.

Schedule G-5: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule G-5 would be increased by 10 percent. The base fee for a health risk screening analysis for

a source covered by Schedule G-5 (included in the RSF for the first TAC source in the application), would also be increased by 10 percent.

Schedule H: Semiconductor and Related Sources

Based on the cost recovery methodology listed in Table 2, the fees in Schedule H would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule H, which would be increased by 10 percent from $354 to $389.

Schedule I: Dry Cleaners

Based on the cost recovery methodology listed in Table 2, the fees in Schedule I would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule I, which would be increased by 10 percent from $354 to $389.

Schedule K: Solid Waste Disposal Sites

Based on the cost recovery methodology listed in Table 2, the fees in Schedule K would be increased by 14 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule K, which would be increased by 10 percent from $354 to $389.

District staff is also proposing to restructure the Initial and Permit to Operate fees in Schedule K to provide better characterization of the sources being regulated. First, the description of the source listed in existing subsections 1a, 2a, 3a, and 3b in Schedule K would be changed from “solid waste disposal site” to “landfill”. The sources at a landfill subject to fees would then be divided into three types: (1) the landfill decomposition process (revised subsections 1a and 3a), which applies to landfills that are active, inactive, or closed if District permits are required, (2) the waste and cover material dumping process (revised subsections 1b and 3b), which applies to active landfills, and (3) the excavation, bulldozing, and compacting process (new subsections 1c and 3c), which applies to active landfills. All of these processes at landfills are currently permitted by the District under a single source number (subject to a single fee, which is based on whether the landfill is active or inactive). Under the revised approach, active landfills will be assigned separate permit source numbers corresponding to each of the source types described above. These changes in the categorization of sources covered by Schedule K were designed to be “fee neutral”, so that the fees under Schedule K for both inactive and active landfills will remain unchanged by the restructuring itself (as was previously noted, however, the fees for Schedule K are proposed to be increased by 14 percent based on considerations of cost recovery).

District staff is also proposing some grammatical improvements to the descriptions of the reports and questionnaires that require fees under Schedule K Parts 5a, 5b, and 5c.

Schedule L: Asbestos Operations

Based on the cost recovery methodology listed in Table 2, the fees in Schedule L would be increased by 12 percent.

Schedule M: Major Stationary Source Fees

Schedule M is an emissions-based schedule that applies to various permitted facilities emitting 50 tons per year of organic compounds, sulfur oxides, nitrogen oxides, and/or PM_{10}. The District's time accounting system does not provide data to allow for direct analyses of cost recovery for this schedule. Rather, the fee revenue collected from Fee Schedule M is allocated to the other source category-based permit fee schedules (i.e., Fee Schedules B, C, D, E, F, H, I, and K) based on the specific sources that are subject to Schedule M fees and their level of emissions. In this manner, the cost recovery for Schedule M is indirectly accounted for in the cost recovery analyses completed for the source-category based fee schedules.

District staff is proposing no change for Fee Schedule M for FYE 2012. Schedule M is the second largest fee schedule in terms of fee revenue received by the District, and so the facilities that are subject to Schedule M will generally have increases in their annual permit renewal fees that are below the percentage increases listed in Table 2 for other fees schedules. For example, the five Bay Area petroleum refineries, which are subject to Schedule M and many other fee schedules, would have estimated permit renewal fee increases in FYE 2012 ranging from 4.4 to 7.0 percent.

Schedule N: Toxic Inventory Fees

Based on the cost recovery methodology listed in Table 2, the fees in Schedule N would be increased by 10 percent.

Fees for Schedule N are calculated by a formula that includes the fee revenue that is to be collected for District purposes, as well as the fee revenue that is to be passed through to the State to recover State agency costs related to the Air Toxics Hot Spots Program. The variable F_T, the total amount of fees to be collected, used to calculate fees for Schedule N is proposed to be increased to $724,000, which represents an increase of approximately 10 percent from the current fiscal year. This change does not require any modifications to the language of Schedule N.

The flat fee in Schedule N for facilities with emissions of toxic air contaminants greater than 50 weighted pounds per year and less than 1000 weighted pounds per year would be increased by 10 percent (rounded to the nearest whole dollar) from $75 to $82. No change is proposed for the $5 per nozzle fee in Schedule N for gasoline dispensing facilities.

Schedule P: Major Facility Review Fees

Based on the cost recovery methodology listed in Table 2, the fees in Schedule P would be increased by 14 percent.

Schedule Q: Excavation of Contaminated Soil and Removal of Underground Storage Tanks

The 2011 Cost Recovery and Containment Study did not provide a cost recovery analysis for Fee Schedule Q because no revenue was received by the District for this fee schedule in FYE 2010. This is due primarily to the exemption provided in Regulation 3-105, which indicates that this fee does not apply if a public authority has a program equivalent to the District program (which is the case throughout the Bay Area). District staff is proposing a "cost-of-living" increase of 2 percent for Schedule Q (the increase in the Consumer Price Index from 2009 to 2010 in the Bay Area for urban wage earners and clerical workers was approximately 2 percent).

Schedule R: Equipment Registration Fees

The 2011 Cost Recovery and Containment Study was deemed to be inadequate for establishing proposed fee amendments for Fee Schedule R. The Study indicated that, for FYE 2010, registration fee revenue recovered only 15 percent of related program activity costs with total revenue received of approximately $34,000. The District's equipment registration requirements are relatively new, however, and some were not yet in effect in FYE 2010 (e.g., for existing under-fired char broilers and small boilers). The District also had not begun assessing a renewal fee for dry cleaner registrations in FYE 2010 due to the lack of an automated system for doing so. All of the fees in Schedule R were established in the 2007 to 2010 timeframe, and were based on "bottom-up" estimates of regulatory program activity costs for each source category. District staff therefore believes that a "cost-of-living" increase of 2 percent is appropriate for Schedule R.

District staff is proposing a new fee that would be created in Schedule R for low-use agricultural diesel engines that elect to comply under an Alternative Compliance Plan (ACP). Staff is in the process of developing a new rule (Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use) that would provide an ACP option for certain agricultural facilities to comply with the California Air Resources Board's Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines. Under this proposed rule, if specified criteria are met and the District approves an ACP, Tier 0 and Tier 1 engines may continue to operate for up to 100 hours per year until December 31, 2020, and Tier 2 engines may continue to operate for up to 100 hours for up to 100 hours per year until December 31, 2025. Each engine covered by an ACP must be replaced with the highest tier (lowest emissions) engine available for purchase at the time of replacement. The ACP deadlines are designed to enable replacement of existing engines with Tier 4 engines. The owner or

operator of each engine covered by an ACP must record its usage and report it to the District each year.

The State ATCM requires that stationary agricultural diesel engines greater than 50 horsepower in size be permitted or registered with the local air district. In the Bay Area, agricultural facilities are generally exempt from permit requirements, and so the District has a registration system for affected sources that requires an equipment registration fee be paid under Schedule R. Under the staff's fee proposal for FYE 2012, a new fee would be required for each ACP submitted, and this ACP fee would be the same as the fee for initial equipment registration (i.e., $129). This ACP fee would be used to recover some of the District's costs of setting up and maintaining the online system that will be used to manage the ACP information, and the staff time that will be needed to check compliance with the terms of the ACP.

Schedule S: Naturally Occurring Asbestos Operations

Based on the cost recovery methodology listed in Table 2, the fees in Schedule S would be increased by 14 percent.

Schedule T: Greenhouse Gas Fees

Based on the cost recovery methodology listed in Table 2, the fees in Schedule T would not be changed.

A typographical error found in the table of Global Warming Potentials given in Schedule T is proposed to be corrected. Specifically, "HFC-43-1-mee" would be corrected to be "HFC-43-10-mee".

Schedule U: Indirect Source Review Fees

District staff is proposing no changes in Schedule U: Indirect Source Review Fees. Schedule U was adopted in 2009 to establish fees for an upcoming District Indirect Source Review (ISR) rule. The ISR rule has been included as a Land Use and Local Impact Measure in the Bay Area 2010 Clean Air Plan, and the fees in Schedule U will be considered for amendment concurrent with development of this new rule.

4. PROJECTED FEE REVENUE AND COSTS OF PROGRAM ACTIVITIES

On an overall basis, the 2011 Cost Recovery and Containment study concluded that, for FYE 2010, fee revenue recovered 62 percent of regulatory program activity costs, with revenue of $27,361,802 and costs of $44,186,894. For permitted sources, fees recovered 63 percent of costs, with revenue of $25,640,521 and costs of $40,807,031 (this excludes revenue and costs for non-permitted sources associated with Fee Schedules L, R, and S). For non-permitted sources (covered by Fee Schedules L, R, and S), fees recovered 51 percent of costs, with revenue of $1,721,281 and costs of $3,379,863.

The cost recovery figures are not expected to change significantly from FYE 2010 to the current FYE 2011. For FYE 2011, overall fee revenue was initially projected to increase by 5.5 percent relative to FYE 2010 (based on a 5 percent increase in all fees, except for Fee Schedule P which was increased by 10 percent). As was previously noted, however, actual fee revenue for FYE 2011 is expected to fall short of budget projections by about $1.2 million, resulting in a revised fee revenue increase of less than 1 percent from FYE 2010 to FYE 2011. Regulatory program costs are expected to be relatively flat from FYE 2010 to FYE 2011.

With the proposed fee amendments for FYE 2012, the District's projected fee revenue for permitted sources is $29.774 million. Fee revenue for non-permitted sources for FYE 2012 is projected to be $2.571 million. With the implementation of cost containment measures, regulatory program costs are expected to decrease slightly in FYE 2012. Clearly, fee revenue in FYE 2012 will remain well below the District's regulatory program costs for both permitted and non-permitted sources.

5. STATUTORY AUTHORITY FOR PROPOSED FEE INCREASES

The District is a regional regulatory agency, and its fees are used to recover the costs of issuing permits, performing inspections, and other associated regulatory activities. The District's fees fall into the category specified in Section 1(e) of Article XIII C of the California Constitution which specifies that these type of charges assessed to regulated entities to recover regulatory program activity costs are not taxes. The amount of fee revenue collected by the District has been clearly shown to be much less than the costs of the District's regulatory program activities both for permitted and non-permitted sources.

The District's fee regulation, with its various fee schedules, is used to allocate regulatory program costs to fee payers in a manner which bears a fair or reasonable relationship to the payer's burden on, or benefits received from, regulatory activities. Permit fees are based on the type and size of the source being regulated, with minimum and maximum fees being set in recognition of the practical limits to regulatory costs that exist based on source size. Add-on fees are used to allocate costs of specific regulatory requirements that apply to some sources but not others (e.g., health risk screening fees, public notification fees, alternative compliance plan fees). Emissions-based fees are used to allocate costs of regulatory activities not reasonably identifiable with specific fee payers.

Since 2006, the District has used annual analyses of cost recovery performed at the fee-schedule level, which is based on data collected from a labor-tracking system, to adjust fees. These adjustments are needed as the District's regulatory program activities change over time based on changes in statutes, rules and regulations, enforcement priorities, and other factors.

State law authorizes air districts to adopt fee schedules to cover the costs of various air pollution programs. California Health and Safety Code (H&S Code) section 42311(a)

provides authority for an air district to collect permit fees to cover the costs of air district programs related to permitted stationary sources. H&S Code section 42311(f) further authorizes the District to assess additional permit fees to cover the costs of programs related to toxic air contaminants. H&S Code section 41512.7 limits the allowable percentage increase in fees for authorities to construct and permits to operate to 15 percent per year.

H&S Code section 44380(a) authorizes air districts to adopt a fee schedule that recovers the costs to the air district and State agencies of the Air Toxics Hot Spots Program (AB 2588). The section provides the authority for the District to collect toxic inventory fees under Schedule N.

H&S Code section 42311(h) authorizes air districts to adopt a schedule of fees to cover the reasonable costs of the Hearing Board incurred as a result of appeals from air district decisions on the issuance of permits. Section 42364(a) provides similar authority to collect fees for the filing of applications for variances or to revoke or modify variances. These sections provide the authority for the District to collect Hearing Board fees under Schedule A.

H&S Code section 42311(g) authorizes air districts to adopt a schedule of fees to be assessed on areawide or indirect sources of emissions, which are regulated but for which permits are not issued by the air district, to recover the costs of air district programs related to these sources. This section provides the authority for the District to collect asbestos fees (including fees for Naturally Occurring Asbestos operations), soil excavation reporting fees, registration fees for various types of regulated equipment, and fees for Indirect Source Review.

The proposed fee amendments are in accordance with all applicable authorities. Based on the results of the 2011 Cost Recovery and Containment Study (a copy of which is available on request), the District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the District's regulatory activities and the manner in which the District fees allocate those costs to a payor bear a fair and reasonable relationship to the payor's burdens on the District regulatory activities and benefits received from those activities. Permit fee revenue (after adoption of the proposed amendments) would still be well below the District's regulatory program activity costs associated with permitted sources. Similarly, fee revenue for non-permitted areawide sources would be below the District's costs of regulatory programs related to these sources. Toxic inventory fee revenue would be below the District's costs of implementing the AB 2588 program. Hearing Board fee revenue would be below the District's costs associated with Hearing Board activities related to variances and permit appeals. Fee increases for authorities to construct and permits to operate would be less than 15 percent per year.

6. ASSOCIATED IMPACTS AND OTHER RULE DEVELOPMENT REQUIREMENTS

6.1 EMISSIONS IMPACTS

There will be no direct change in air emissions as a result of the proposed amendments.

6.2 ECONOMIC IMPACTS

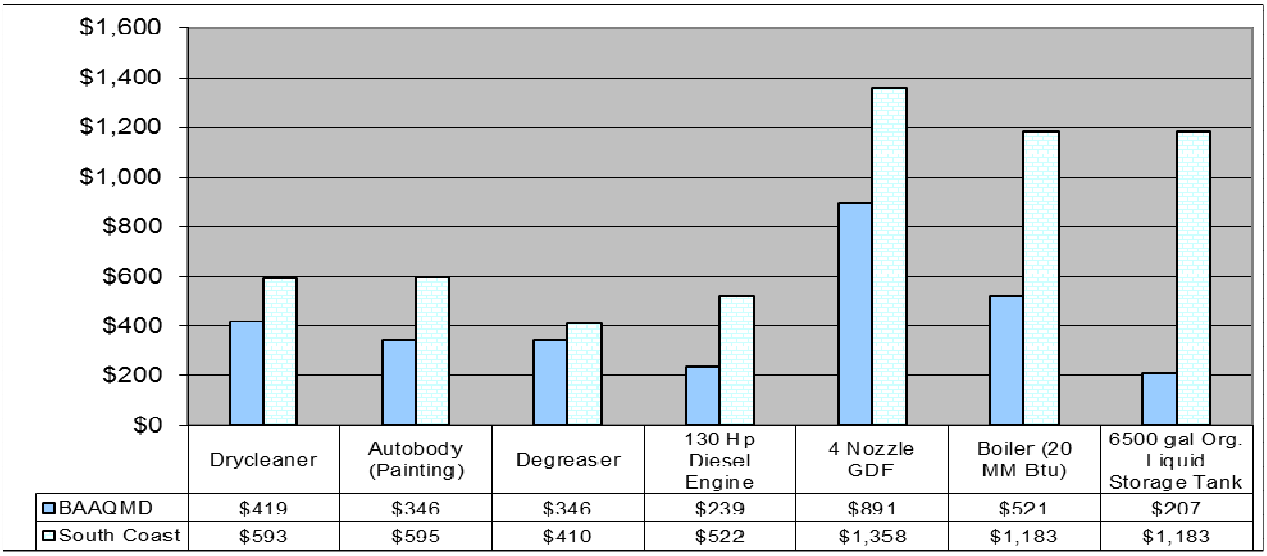
The District must, in some cases, consider the socioeconomic impacts and incremental costs of proposed rules or amendments. Section 40728.5(a) of the California H&S Code requires that socioeconomic impacts be analyzed whenever a district proposes the adoption, amendment, or repeal of a rule or regulation that will significantly affect air quality or emissions limitations. The proposed fee amendments will not significantly affect air quality or emissions limitations, and so a socioeconomic impact analysis is not required.

Section 40920.6 of the H&S Code specifies that an air district is required to perform an incremental cost analysis for a proposed rule, if the purpose of the rule is to meet the requirement for best available retrofit control technology or for a feasible measure. The proposed fee amendments are not best available retrofit control technology requirements, nor are they a feasible measure required under the California Clean Air Act. Therefore, an incremental cost analysis is not required.

The financial impact of the proposed fee amendments on small businesses is expected to be minor. Many small businesses operate only one or two permitted sources, and generally pay only the minimum permit renewal fees. Increases in annual permit renewal fees for most small businesses (e.g., dry cleaners, auto body shops, and office buildings with a backup generator) would about $50 or less, with the exception of gas stations, which would increase by an average of about $230.

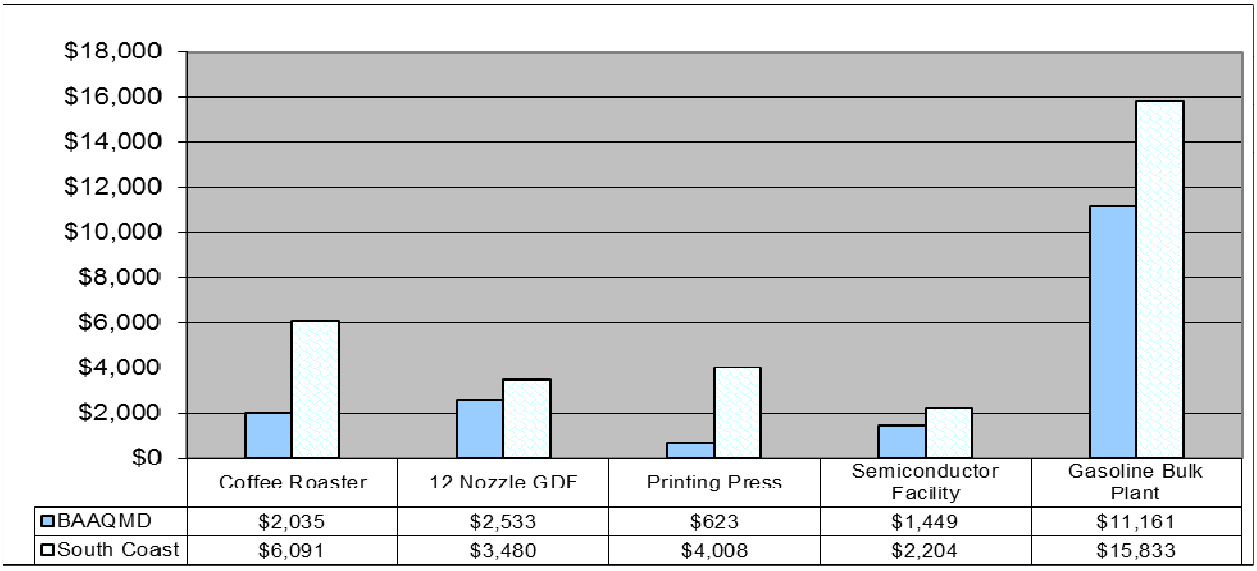
For reference, District permit fees are generally well below that of the South Coast AQMD, the other major metropolitan air district in the state with a cost of living similar to that of the Bay Area. South Coast AQMD staff have indicated that their fee revenue recovers a much higher percentage of associated program activity costs (i.e., about 90 percent) relative to the Bay Area AQMD. A comparison of permit renewal fees recently completed by District staff for 12 different categories of small and medium-sized sources indicated that South Coast AQMD fees are approximately 2.5 times higher than District fees, on average. These fee comparisons are provided in Figures 1 and 2 as follows.

Figure 1. Comparison of Bay Area AQMD and South Coast AQMD Permit Renewal Fees for Various Small Sources



	Drycleaner	Autobody (Painting)	Degreaser	130 Hp Diesel Engine	4 Nozzle GDF	Boiler (20 MM Btu)	6500 gal Org. Liquid Storage Tank
BAAQMD	$419	$346	$346	$239	$891	$521	$207
South Coast	$593	$595	$410	$522	$1,358	$1,183	$1,183

Figure 2. Comparison of Bay Area AQMD and South Coast AQMD Permit Renewal Fees for Various Medium-sized Sources



	Coffee Roaster	12 Nozzle GDF	Printing Press	Semiconductor Facility	Gasoline Bulk Plant
BAAQMD	$2,035	$2,533	$623	$1,449	$11,161
South Coast	$6,091	$3,480	$4,008	$2,204	$15,833

For larger facilities, increases in annual permit renewal fees would cover a considerable range due to differences in the facility's size, complexity, and type of emission sources. The annual permit renewal fees for the five Bay Area refineries, the District's highest fee payers, would increase within an estimated range of 4.4 to 7.0 percent ($64,000 to $153,500), with the average increase being 5.7 percent ($98,000). For facilities with Title V permits, not including the five refineries, annual permit fees would increase within an estimated range of 0.8 to 13.8 percent ($190 to $20,400), with the average increase being 8.9 percent ($4,500).

District staff is sympathetic to businesses that are impacted by the prolonged economic downturn, but feel that additional revenue is needed to continue the District's core regulatory programs and other air quality initiatives. Even with these fee increases, and various cost containment measures, the District will likely need to draw on its reserve funds in FYE 2012 to cover expenses. In general, District fee increases are expected to have a minor financial impact on businesses relative to other factors (e.g., the costs of property and labor).

6.3 ENVIRONMENTAL IMPACTS

The California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., and the CEQA Guidelines, 14 CCR 15000 et seq., require a government agency that undertakes or approves a discretionary project to prepare documentation addressing the potential impacts of that project on all environmental media. Certain types of agency actions are, however, exempt from CEQA requirements. The proposed fee amendments are exempt from the requirements of the CEQA under Section 15273 of the CEQA Guidelines, which state: "CEQA does not apply to the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, and other charges by public agencies...." (See also Public Resources Code Section 21080(b)(8)).

Section 40727.2 of the H&S Code imposes requirements on the adoption, amendment, or repeal of air district regulations. It requires an air district to identify existing federal and air district air pollution control requirements for the equipment or source type affected by the proposed change in air district rules. The air district must then note any differences between these existing requirements and the requirements imposed by the proposed change. This fee proposal does not impose a new standard, make an existing standard more stringent, or impose new or more stringent administrative requirements. Therefore, section 40727.2 of the H&S Code does not apply.

6.4 STATUTORY FINDINGS

Pursuant to H&S Code section 40727, regulatory amendments must meet findings of necessity, authority, clarity, consistency, non-duplication, and reference. The proposed amendments to Regulation 3:

- Are necessary to fund the District's efforts to attain and maintain federal and state air quality standards, and to reduce public exposure to toxic air contaminants;
- Are authorized by H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9;
- Are clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Are consistent with other District rules, and not in conflict with any state or federal law;
- Are not duplicative of other statutes, rules or regulations; and
- Reference H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9.

7. RULE DEVELOPMENT PROCESS

On February 18, 2011, the District issued a notice for a public workshop to discuss with interested parties an initial proposal to increase District fees. Distribution of this notice included all District-permitted and registered facilities, asbestos contractors, and a number of other potentially interested stakeholders. The notice was also posted on the District website.

A public workshop was held on March 14, 2011 to discuss the initial proposal. Seven members of the public attended the workshop. On March 23, 2011, District staff provided a briefing on the proposed amendments to the District Board of Directors' Budget and Finance Committee, and an updated briefing for this committee is scheduled for April 28, 2011.

A Public Hearing Notice for the proposed Regulation 3 amendments was issued on April 4, 2011. A public hearing to consider adoption of the portions of the proposed fee amendments that apply to permitted sources is scheduled for May 4, 2011. Under H&S Code section 41512.5, the adoption or revision of fees for non-permitted sources require two public hearings that are held at least 30 days apart from one another. This provision applies to Schedule L: Asbestos Operations, Schedule Q: Excavation of Contaminated Soil and Removal of Underground Storage Tanks, Schedule R: Equipment Registration Fees, and Schedule S: Naturally Occurring Asbestos Operations. A second public hearing has been scheduled for June 15, 2011, to consider adoption of the proposed fee amendments for these fee schedules for non-permitted sources. If adopted, all of the amendments would be made effective on July 1, 2011, which is the beginning of FYE 2012.

8. PUBLIC COMMENTS

As of the date of this report, eight sets of written comments have been received by the District on the fee proposal as follows: (1) William J. Quinn of California Council for Environmental and Economic Balance (CCEEB), (2) Tim Hostettler of A&A Concrete Supply, (3) Guy Greenwood (no affiliation identified), (4) John Soderling (no affiliation identified), (5) Catherine Rode (no affiliation identified), and (6) three identical letters from gasoline dispensing facility (GDF) owners/operators (with signatures from a total of nine individuals). In addition, verbal comments were provided (either at the workshop or by telephone call) by six individuals, including the owners/operators of two auto body shops, three GDFs, and one engineering maintenance company. A summary of the comments received, and District staff responses to these comments, follows.

<u>CCEEB Comments</u>: Four comments were provided as follows.

1. Our primary concern is the proposed double-digit increase in most schedules. This follows a ten percent increase many of our members faced last year. Large and small businesses, local governments, and the State are facing enormous economic

challenges. To increase fees by these levels during this economic downturn is very difficult to accept.

Response: No facility faced an increase in fees as high as 10 percent as a result of the fee amendments adopted last year. Most facilities were subject to 5 percent fee increases. Less than 100 facilities that are subject to the federal Title V permit program faced annual fee increases of 5.3 to 8.0 percent, with the average increase being 6.4 percent. The fees actually paid by some Title V facilities decreased in FYE 2011 relative to the prior year due to decreases in reported activity levels and emissions.

Based on the current FYE 2012 fee proposal, annual permit fees for the five Bay Area refineries, the District's highest fee payers, would increase within an estimated range of 4.4 to 7.0 percent ($64,000 to $153,500), with the average increase being 5.7 percent ($98,000). For facilities with Title V permits, not including the five refineries, annual permit fees would increase within an estimated range of 0.8 to 13.8 percent ($190 to $20,400), with the average increase being 8.9 percent ($4,500).

District staff acknowledges the difficulties that many businesses are having in the economic downturn, but believe that the proposed fee increases are needed to maintain core regulatory programs and to keep District reserve funds from dropping too low.

2. CCEEB was a member of the steering committee of the recently completed Cost Recovery and Containment Study. The consultant made several recommendations to improve cost containment. We strongly encourage the District to establish a process to review these recommendations and to implement those that are appropriate.

Response: District staff agrees with CCEEB, and is interested in getting input from CCEEB on the recommendations for improvement identified in the 2011 Cost Recovery and Containment Study. Many of the specific Best Management Processes identified in the study are either already in place, or are being developed.

3. Many of the activities the District performs are discretionary. Given the difficult economic times, we encourage the District to review the value of each discretionary program to ensure that each is adding sufficient value to the goals of the District and maximizing emissions reductions.

Response: Staff has been discussing prioritization of activities at the Board of Directors committee level, including discussion of those programs that will be curtailed because of budget constraints. The discussion will continue with the District's Board of Directors later this year. Staff invites CCEEB and other interested stakeholders to provide their opinions on this topic.

4. Last year's voter approval of Proposition 26 established new requirements for local government, including special districts, to show that fees are justified. The concluding line in Section 3(e) states: "The local government bears the burden of

proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity." CCEEB suggests that you clarify conformance with this requirement as part of the rule adoption.

Response: This issue is addressed in Section 5 of this report. The District's regulatory fees clearly are not taxes under the definition established in the California Constitution (art. XIII C, § 1). As demonstrated in the 2011 Cost Recovery and Containment Study, the District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the District's regulatory activities — Indeed, they are clearly much less than the full costs of carrying out the activities — and the manner in which the District fees allocate those costs to a payor bear a fair and reasonable relationship to the payor's burdens on the District regulatory activities and benefits received from those activities. None of the District's fees pay for services that benefit the public broadly. Rather, fees are used only to recover the District's costs of issuing permits, conducting inspections, and associated activities involved in directly regulating the entities that are subject to fees.

A&A Concrete Supply Comments: The commenter indicates his opposition to the proposed fee increases. He indicates that the industrial sector is struggling as never before with no real end in sight, and regulatory fees are a big part of the equation. He indicates that his business production is down 80 percent from the high of 2005, and that the owners are trying to figure out what more can be cut to help survive into next year. He indicates that businesses cannot afford to continue funding government inefficiency, and that regulatory agencies should manage their costs and make cuts and reductions where necessary.

Response: District staff acknowledges the difficulties that the commenter and other businesses are having in the economic downturn, but believe that the proposed fee increases are needed to maintain core regulatory programs and keep District reserve funds from dropping too low. The commenter's Bay Area facility, a concrete batch plant that has seven District-permitted sources and six abatement devices, would have an estimated permit renewal fee increase of about 12 percent, or $386 if the fee proposal is adopted.

The District has implemented a number of measures to contain costs including reducing expenditures on services and supplies and maintaining vacant staff positions. Even with these cost containment measures and proposed fee increases, the District will likely need to draw on its reserve accounts in FYE 2012 to cover expenses. With no fee increases, much more significant use of reserves would be required, and reserve funds would likely drop below minimum levels established by the District's Board of Directors as being appropriate.

Guy Greenwood Comments: The commenter (evidently a GDF owner/operator)

indicates his opposition to the proposed fee increases. He cites the high costs of complying with CARB Enhanced Vapor Recovery (EVR) requirements. He indicates that the District should do with what it's got until the economy recovers and facilities can afford it.

Response: The EVR program was adopted by CARB because of significant emissions of volatile organic compounds, including the toxic air contaminant benzene, from GDFs in California. Emissions from GDFs have been reduced by an estimated 50 percent due to EVR. GDFs are a source category with very significant emissions. Bay Area GDFs account for an estimated 6 tons per day of volatile organic compound emissions. Because of the importance of minimizing emissions from GDFs, the District maintains a rigorous GDF enforcement program, including 10 full-time dedicated inspectors.

District staff acknowledges the significant costs that GDFs have had in complying with CARB's EVR requirements. The EVR program has also increased the District's regulatory program costs, due to significant increases in the number and complexity of regulatory requirements. The 2011 Cost Recovery and Containment Study concluded that Fee Schedule D, which GDFs are subject to, recovered only 43 percent of regulatory program costs.

As was previously indicated, the District has implemented a number of measures to contain costs including reducing expenditures on services and supplies and maintaining vacant staff positions. Even with these cost containment measures and proposed fee increases, the District will likely need to draw on its reserve accounts in FYE 2012 to cover expenses.

John Soderling Comments: The commenter indicates his opposition to the proposed fee increases. He cites the bad economy, and suggests that the District should instead cut operating costs by reducing staff or cutting salaries and benefits.

Response: District staff acknowledges the difficulties that many businesses are having in the economic downturn, but believe that the proposed fee increases are needed to maintain core regulatory programs and keep District reserve funds from dropping too low. District staff has included feasible cost containment measures in its proposed FYE 2012 budget.

Christine Rode Comments: The commenter indicates her opposition to the proposed fee increases. She cites the bad economy, and indicates that a 10 to 14 percent fee increase is a bit exorbitant.

Response: See previous response to John Soderling's comment.

Gas Station Owners/Operators Comments: Three written comments were provided in three identical letters received from owners/operators of GDFs as follows. (Similar comments were made verbally by three GDF owner/operators in attendance at the workshop).

1. At the workshop on March 14, 2011, it seemed that the fees were pre-decided, and yet the notice emphasized that the effective date would be July 1, 2011.

Response: A presentation of the draft staff proposal was provided at the March 14, 2011 workshop. The presentation summarized the process that would be followed for consideration of adoption of fee amendments by the District's Board of Directors. As the commenter indicates, staff is recommending that the effective date of any amendments adopted would be July 1, 2011.

2. During this difficult economy, new fees should not be imposed as unemployment is very high and this would not help the economy.

Response: See previous response to John Soderling's comment.

3. The District has, during the few years, required all gas stations to spend between $70,000 and $120,000 for some changes, so there is no more room for extra fees.

Response: See previous response to Guy Greenwood's comment.

Auto Body Shop Owner/Operators: Two auto body shop owners/operators provided verbal comments indicating their opposition to the proposed fee increases due to the economic downturn and indicated that their business activity levels were at all-time lows.

Response: See previous response to John Soderling's comment.

Additional Comment: A representative of an engineering maintenance company indicated that the District should increase enforcement efforts because some businesses are operating without required District permits, and this is not fair to businesses that comply with these requirements and pay their fees.

Response: One of the reasons that District staff is proposing to increase fees is to maintain an adequate inspection staff. District inspectors routinely check to see if Bay Area businesses have the necessary permits for their equipment. Facilities that are found to be out of compliance with permit requirements are required to come into compliance, and must also pay appropriate back fees and penalties. The District also conducts outreach to city and county planning and building departments regarding District permit requirements.

9. CONCLUSIONS

District staff finds that the proposed fee amendments meet the findings of necessity, authority, clarity, consistency, non-duplication and reference specified in H&S Code section 40727. The proposed amendments:

- Are necessary to fund the District's efforts to attain and maintain federal and

state air quality standards, and to reduce public exposure to toxic air contaminants;

- Are authorized by H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9;
- Are clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Are consistent with other District rules, and not in conflict with any state or federal law;
- Are not duplicative of other statutes, rules or regulations; and
- Reference H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9.

The proposed fee amendments will be used by the District to recover the costs of issuing permits, performing inspections, and other associated regulatory activities. Based on the results of the 2011 Cost Recovery and Containment Study, the District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the District's regulatory activities, and the manner in which the District fees allocate those costs to a payor bear a fair and reasonable relationship to the payor's burdens on the District regulatory activities and benefits received from those activities. Permit fee revenue (after adoption of the proposed amendments) would still be well below the District's regulatory program activity costs associated with permitted sources. Similarly, fee revenue for non-permitted sources would be below the District's costs of regulatory programs related to these sources. Fee increases for authorities to construct and permits to operate would not exceed 15 percent per year as required under H&S Code section 41512.7.

The proposed amendments to Regulation 3 are exempt from the requirements of the CEQA under Section 15273 of the CEQA Guidelines.

District staff recommends that the Board of Directors adopt the proposed amendments to Regulation 3: Fees, with an effective date of July 1, 2011, and approve the filing of CEQA Notices of Exemption (one for adoption of fee amendments that apply to permitted sources, and a second for the adoption of fee amendments that apply to non-permitted sources).

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

STAFF REPORT

PROPOSED AMENDMENTS TO BAAQMD REGULATION 3: FEES

APRIL 20, 2011

APPENDIX A
PROPOSED REGULATORY LANGUAGE

REGULATION 3
FEES

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REGULATION 3
FEES

(Adopted June 18, 1980)

3-100 GENERAL

3-101 Description: This regulation establishes fees to be charged for Hearing Board filings, for permits, banking, renewal of permits, costs of environmental documentation, asbestos operations, air toxics inventories, equipment registrations, soil excavation and underground tank removals, and indirect source review.

(Amended 7/6/83; 11/2/83; 2/21/90; 12/16/92; 8/2/95; 12/2/98; 5/21/03; 5/21/08; 5/20/09)

3-102 Deleted July 12, 1989

3-103 Exemption, Abatement Devices: Installation, modification, or replacement of abatement devices on existing sources are subject to fees pursuant to Section 3-302.3. All abatement devices are exempt from annual permit renewal fees. However, emissions from abatement devices, including any secondary emissions, shall be included in facility-wide emissions calculations when determining the applicability of and the fees associated with Schedules M, N, P, and T.

(Amended 6/4/86; 7/1/98; 6/7/00; 5/21/08)

3-104 Deleted August 2, 1995

3-105 Exemption, Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees: Fees shall not be required, pursuant to Section 3-322, for operations associated with the excavation of contaminated soil and the removal of underground storage tanks if one of the following is met:

105.1 The tank removal operation is being conducted within a jurisdiction where the APCO has determined that a public authority has a program equivalent to the District program and persons conducting the operations have met all the requirements of the public authority.

105.2 Persons submitting a written notification for a given site have obtained an Authority to Construct or Permit to Operate in accordance with Regulation 2, Rule 1, Section 301 or 302. Evidence of the Authority to Construct or the Permit to Operate must be provided with any notification required by Regulation 8, Rule 40.

(Adopted 1/5/94; Amended 5/21/03)

3-106 Deleted December 2, 1998

3-107 Exemption, Sources Exempt from Permit Requirements: Any source that is exempt from permit requirements pursuant to Regulation 2, Rule 1, Sections 103 through 128 is exempt from permit fees. However, emissions from exempt sources shall be included in facility-wide emissions calculations when determining the applicability of and the fees associated with Schedules M, N, and P.

(Adopted June 7, 2000)

3-200 DEFINITIONS

3-201 Cancelled Application: Any application which has been withdrawn by the applicant or cancelled by the APCO for failure to pay fees or to provide the information requested to make an application complete.

(Amended 6/4/86; 4/6/88)

3-202 Gasoline Dispensing Facility: Any stationary facility which dispenses gasoline directly into the fuel tanks of vehicles, such as motor vehicles, aircraft or boats. The facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.

(Amended February 20, 1985)

3-203 Filing Fee: A fixed fee for each source in an authority to construct.

(Amended June 4, 1986)

3-204 **Initial Fee:** The fee required for each new or modified source based on the type and size of the source. The fee is applicable to new and modified sources seeking to obtain an authority to construct. Operation of a new or modified source is not allowed until the permit to operate fee is paid.

(Amended June 4, 1986)

3-205 **Authority to Construct:** Written authorization from the APCO, pursuant to Section 2-1-301, for a source to be constructed or modified or for a source whose emissions will be reduced by the construction or modification of an abatement device.

(Amended June 4, 1986)

3-206 **Modification:** See Section 1-217 of Regulation 1.

3-207 **Permit to Operate Fee:** The fee required for the annual renewal of a permit to operate or for the first year of operation (or prorated portion thereof) of a new or modified source which received an authority to construct.

(Amended 6/4/86; 7/15/87; 12/2/98; 6/7/00)

3-208 **Deleted June 4, 1986**

3-209 **Small Business:** A business with no more than 10 employees and gross annual income of no more than $750,000 that is not an affiliate of a non-small business.

(Amended 6/4/86; 6/6/90; 6/7/00; 6/15/05; 6/16/10)

3-210 **Solvent Evaporating Source:** Any source utilizing organic solvent, as part of a process in which evaporation of the solvent is a necessary step. Such processes include, but are not limited to, solvent cleaning operations, painting and surface coating, rotogravure coating and printing, flexographic printing, adhesive laminating, etc. Manufacture or mixing of solvents or surface coatings is not included.

(Amended July 3, 1991)

3-211 **Source:** See Section 1-227 of Regulation 1.

3-212 **Deleted August 2, 1995**

3-213 **Major Stationary Source:** For the purpose of Schedule M, a major stationary source shall be any District permitted plant, building, structure, stationary facility or group of facilities under the same ownership, leasehold, or operator which, in the base calendar year, emitted to the atmosphere organic compounds, oxides of nitrogen (expressed as nitrogen dioxide), oxides of sulfur (expressed as sulfur dioxide), or PM_{10} in an amount calculated by the APCO equal to or exceeding 50 tons per year.

(Adopted 11/2/83; Amended 2/21/90; 6/6/90; 8/2/95; 6/7/00)

3-214 **Deleted October 20, 1999, effective March 1, 2000**

3-215 **Deleted October 20, 1999, effective March 1, 2000**

3-216 **Deleted October 20, 1999, effective March 1, 2000**

3-217 **Deleted October 20, 1999, effective March 1, 2000**

3-218 **Deleted October 20, 1999, effective March 1, 2000**

3-219 **Deleted October 20, 1999, effective March 1, 2000**

3-220 **Deleted October 20, 1999, effective March 1, 2000**

3-221 **Deleted October 20, 1999, effective March 1, 2000**

3-222 **Deleted October 20, 1999, effective March 1, 2000**

3-223 **Start-up Date:** Date when new or modified equipment under an authority to construct begins operating. The holder of an authority to construct is required to notify the APCO of this date at least 3 days in advance. For new sources, or modified sources whose authorities to construct have expired, operating fees are charged from the startup date.

(Adopted 6/4/86; Amended 6/6/90)

3-224 **Permit to Operate:** Written authorization from the APCO pursuant to Section 2-1-302.

(Adopted 6/4/86; Amended 6/7/00)

3-225 **Minor Modification:** Any physical change or alteration to a source listed on Schedules G-3, ~~or~~ G-4, or G-5 that will not increase emissions of any air contaminant. Such modifications may include alterations to improve energy and operational efficiency and those that reduce emissions. Alterations to increase actual or maximum production capacity shall not be

considered minor modifications. Final determination of the applicability of this section shall be made by the APCO.

(Adopted June 6, 1990)

3-226 **Air Toxics "Hot Spots" Information and Assessment Act of 1987:** The Air Toxics "Hot Spots" Information and Assessment Act of 1987 directs the California Air Resources Board and the Air Quality Management Districts to collect information from industry on emissions of potentially toxic air contaminants and to inform the public about such emissions and their impact on public health. It also directs the Air Quality Management District to collect fees sufficient to cover the necessary state and District costs of implementing the program.

(Adopted 10/21/92; Amended 6/15/05)

3-227 **Toxic Air Contaminant, or TAC:** An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in Table 2-5-1 of Regulation 2, Rule 5.

(Adopted 10/21/92; Amended 6/15/05)

3-228 **Deleted December 2, 1998**
3-229 **Deleted December 2, 1998**
3-230 **Deleted December 2, 1998**
3-231 **Deleted December 2, 1998**
3-232 **Deleted December 2, 1998**
3-233 **Deleted December 2, 1998**
3-234 **Deleted December 2, 1998**
3-235 **Deleted December 2, 1998**
3-236 **Deleted December 2, 1998**

3-237 **PM_{10}:** See Section 2-1-229 of Regulation 2, Rule 1.

(Adopted June 7, 2000)

3-238 **Risk Screening Fee:** Fee for a new or modified source of toxic air contaminants for which a health risk screening analysis (HRSA) is required under Regulation 2-5-401, or for an HRSA prepared for other purposes (e.g., for determination of permit exemption in accordance with Regulations 2-1-316, 2-5-301 and 2-5-302; or for determination of exemption from emission control requirements pursuant to Regulation 8-47-113 and 8-47-402).

(Adopted June 15, 2005)

3-239 **Toxic Surcharge**: Fee paid in addition to the permit to operate fee for a source that emits one or more toxic air contaminants at a rate which exceeds a chronic trigger level listed in Table 2-5-1.

(Adopted June 15, 2005)

3-240 **Biogenic Carbon Dioxide:** Carbon dioxide emissions resulting from materials that are derived from living cells, excluding fossil fuels, limestone and other materials that have been transformed by geological processes. Biogenic carbon dioxide originates from carbon (released in the form of emissions) that is present in materials that include, but are not limited to, wood, paper, vegetable oils, animal fat, and food, animal and yard waste.

(Adopted May 21, 2008)

3-241 **Green Business:** A business or government agency that has been certified under the Bay Area Green Business Program coordinated by the Association of Bay Area Governments and implemented by participating counties.

(Adopted June 16, 2010)

3-300 **STANDARDS**

3-301 **Hearing Board Fees:** Applicants for variances or appeals or those seeking to revoke or modify variances or abatement orders or to rehear a Hearing Board decision shall pay the applicable fees, including excess emission fees, set forth in Schedule A.

(Amended June 7, 2000)

3-302 **Fees for New and Modified Sources:** Applicants for authorities to construct and permits to

operate new sources shall pay for each new source: a filing fee of ~~$354~~$389, the initial fee, the risk screening fee, the permit to operate fee, and toxic surcharge (given in Schedules B, C, D, E, F, H, I or K). Applicants for authorities to construct and permits to operate modified sources shall pay for each modified source, a filing fee of ~~$354~~$389, the initial fee, the risk screening fee, and any incremental increase in permit to operate and toxic surcharge fees. Where more than one of the schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. Except for gasoline dispensing facilities (Schedule D) and semiconductor facilities (Schedule H), the size to be used for a source when applying the schedules shall be the maximum size the source will have after the construction or modification. Where applicable, fees for new or modified sources shall be based on maximum permitted usage levels or maximum potential to emit including any secondary emissions from abatement equipment. The APCO may reduce the fees for new and modified sources by an amount deemed appropriate if the owner or operator of the source attends an Industry Compliance School sponsored by the District.

302.1 Small Business Discount: If an applicant qualifies as a small business and the source falls under schedules B, C, D (excluding gasoline dispensing facilities), E, F, H, I or K, the filing fee, initial fee, and risk screening fee shall be reduced by 50%. All other applicable fees shall be paid in full.

302.2 Deleted July 3, 1991

302.3 Fees for Abatement Devices: Applicants for an authority to construct and permit to operate abatement devices where there is no other modification to the source shall pay a ~~$354~~$389 filing fee and initial and risk screening fees that are equivalent to 50% of the initial and risk screening fees for the source being abated. For abatement devices abating more than one source, the initial fee shall be 50% of the initial fee for the source having the highest initial fee.

302.4 Fees for Reactivated Sources: Applicants for a Permit to Operate reactivated, previously permitted equipment shall pay the full filing, initial, risk screening, permit, and toxic surcharge fees.

302.5 Schedule G Fees: Applicants for minor modifications to permitted sources subject to Schedules G-3, G-4, or G-5 shall pay filing, initial, risk screening, permit to operate, and toxic surcharge fees specified under Schedule G-2. Permit renewal fees will continue to be charged under Schedules G-3, G-4, and G-5.

302.6 Green Business Discount: If an applicant qualifies as a green business, the filing fee, initial fee, and risk screening fee shall be reduced by 10%. All other applicable fees shall be paid in full.

(Amended 5/19/82; 7/6/83; 6/4/86; 7/15/87; 6/6/90; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00;6/6/01, 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

3-303 **Back Fees:** An applicant required to obtain a permit to operate existing equipment in accordance with District regulations shall pay back fees equal to the permit to operate fees and toxic surcharges given in the appropriate Schedule (B, C, D, E, F, H, I or K) prorated from the effective date of permit requirements. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. The applicant shall also pay back fees equal to toxic inventory fees pursuant to Section 3-320 and Schedule N. The maximum back fee shall not exceed a total of five years' permit, toxic surcharge, and toxic inventory fees. An owner/operator required to register existing equipment in accordance with District regulations shall pay back fees equal to the annual renewal fee given in Schedule R prorated from the effective date of registration requirements, up to a maximum of five years.

(Amended 5/19/82; 7/6/83; 6/4/86; 7/15/87, 6/6/90; 7/3/91; 10/8/97; 6/15/05; 5/20/09)

3-304 **Alteration:** An applicant to alter an existing permitted source shall pay only the filing fee, provided that the alteration does not result in an increase in emissions of any regulated air pollutant.

(Amended 6/4/86; 11/15/00; 6/2/04)

3-305 **Cancellation or Withdrawal:** There will be no refund of initial, risk screening, and filing fees if an application is cancelled or withdrawn. However, if an application for identical equipment

is submitted within six months of the date of cancellation or withdrawal, the initial fee will be credited in full against the fee for the new application.

(Amended 7/6/83; 4/6/88; 10/8/97; 6/15/05)

3-306 **Change in Conditions:** If an applicant applies to change the conditions on an existing authority to construct or permit to operate, the applicant will pay the following fees. There will be no change in anniversary date.

306.1 Administrative Condition Changes: An applicant applying for an administrative change in permit conditions shall pay a fee equal to the filing fee for a single source, provided the following criteria are met:

1.1 The condition change applies to a single source or a group of sources with shared permit conditions.

1.2 The condition change does not subject the source(s) to any District Regulations or requirements that were not previously applicable.

1.3 The condition change does not result in any increase in emissions of POC, NPOC, NO_x, CO, SO_2, or PM_{10} at any source or the emission of a toxic air contaminant above the trigger levels identified in Table 2-5-1

1.4 The condition change does not require a public notice.

306.2 Other Condition Changes: Applicant shall pay the filing, initial, and risk screening fees required for new and modified equipment under Section 3-302. If the condition change will result in higher permit to operate fees, the applicant shall also pay any incremental increases in permit to operate fees and toxic surcharges.

(Amended 7/6/83; 6/4/86; 6/6/90; 10/8/97; 6/7/00; 6/15/05)

3-307 **Transfers:** The owner/operator of record is the person to whom a permit is issued or, if no permit has yet been issued to a facility, the person who applied for a permit. Permits are valid only for the owner/operator of record. Permits are re-issued to the new owner/operator of record with no change in expiration dates.

(Amended 2/20/85; 6/4/86; 11/5/86; 4/6/88; 10/8/97, 5/1/02; 5/21/03; 6/02/04)

3-308 **Change of Location:** An applicant who wishes to move an existing source, which has a permit to operate, shall pay no fee if the move is on the same facility. If the move is not on the same facility, the source shall be considered a new source and subject to Section 3-302. This section does not apply to portable permits meeting the requirements of Regulation 2-1-220 and 413.

(Amended 7/6/83; 6/4/86; 6/15/05)

3-309 **Duplicate Permit:** An applicant for a duplicate permit to operate shall pay a fee of $72 per permit.

(Amended 5/19/99, 5/1/02; 5/21/03; 6/02/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

3-310 **Fee for Constructing Without a Permit:** An applicant for an authority to construct and a permit to operate a source, which has been constructed or modified without an authority to construct, shall pay the following fees:

310.1 Sources subject to permit requirements on the date of initial operation shall pay fees for new construction pursuant to Section 3-302, any back fees pursuant to Section 3-303, a late fee equal to 100% of the initial fee, plus the risk screening fee. A modified gasoline dispensing facility subject to Schedule D that is not required to pay an initial fee shall pay back fees, a late fee equal to 100% of the filing fee, plus the risk screening fee.

310.2 Sources previously exempt from permit requirements that lose their exemption due to changes in District, state, or federal regulations shall pay a permit to operate fee and toxic surcharge for the coming year and any back fees pursuant to Section 3-303.

310.3 Sources previously exempt from permit requirements that lose their exemption due to a change in the manner or mode of operation, such as an increased throughput, shall pay fees for new construction pursuant to Section 3-302. In addition, sources applying for permits after commencing operation in a non-exempt mode shall also pay a late fee equal to 100% of the initial fee plus the risk screening fee and any back fees pursuant to Section 3-303.

310.4 Sources modified without a required authority to construct shall pay fees for

modification pursuant to Section 3-302 and a late fee equal to 100% of the initial fee.

(Amended 7/6/83; 4/18/84; 6/4/86; 6/6/90; 7/3/91; 8/2/95; 10/8/97; 6/02/04; 6/15/05)

3-311 **Banking:** Any applicant who wishes to bank emissions for future use, or convert an ERC into an IERC, shall pay a filing fee of ~~$354~~$389 per source plus the initial fee given in Schedules B, C, D, E, F, H, I or K. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. Any applicant for the withdrawal of banked emissions shall pay a fee of ~~$354~~$389.

(Amended 7/6/83; 6/4/86; 7/15/87; 7/3/91; 6/15/94; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03; 6/02/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

3-312 **Emission Caps and Alternative Compliance Plans:** Any facility which elects to use an alternative compliance plan contained in:

312.1 Regulation 8 ("bubble") to comply with a District emission limitation or to use an annual or monthly emission limit to acquire a permit in accordance with the provisions of Regulation 2, Rule 2, shall pay an additional annual fee equal to fifteen percent of the total plant permit to operate fee.

312.2 Regulation 2, Rule 9 shall pay an annual fee of ~~$893~~$982 for each source included in the alternative compliance plan, not to exceed ~~$8,934~~$9,827.

(Adopted 5/19/82; Amended 6/4/86; 5/19/99; 6/7/00;6/6/01; 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

3-313 **Deleted May 19, 1999**

3-314 **Deleted August 2, 1995**

3-315 **Costs of Environmental Documentation:** An applicant for an Authority to Construct a project which is subject to review under the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) shall pay, in addition to the fees required under Section 3-302 and in any applicable schedule, the District's costs of performing all environmental evaluation required pursuant to the California Environmental Quality Act, the District's costs in preparing any environmental study or Environmental Impact Report (including the costs of any outside consulting assistance which the District may employ in connection with the preparation of any such study or report), as well as the District's reasonable internal costs (including overhead) of processing and reviewing the required environmental documentation.

(Adopted 12/18/85; Amended 5/1/02)

3-316 **Deleted June 6, 1990**

3-317 **Asbestos Operation Fees:** After July 1, 1988, persons submitting a written plan, as required by Regulation 11, Rule 2, Section 401, to conduct an asbestos operation shall pay the fee given in Schedule L.

(Adopted 7/6/88; Renumbered 9/7/88; Amended 8/2/95)

3-318 **Public Notice Fee, Schools:** Pursuant to Section 42301.6(b) of the Health and Safety Code, an applicant for an authority to construct or permit to operate subject to the public notice requirements of Regulation 2-1-412 shall pay, in addition to the fees required under Section 3-302 and in any applicable schedule, a fee to cover the expense of preparing and distributing the public notices to the affected persons specified in Regulation 2-1-412 as follows:

318.1 A fee of $2100 per application, and

318.2 The District's cost exceeding $2100 of preparing and distributing the public notice.

318.3 The District shall refund to the applicant the portion of any fee paid under this Section that exceeds the District's cost of preparing and distributing the public notice.

(Adopted 11/1/89; Amended 10/8/97; 7/1/98; 5/19/99; 6/7/00; 5/21/03; 6/2/04; 6/16/10)

3-319 **Major Stationary Source Fees:** Any major stationary source emitting 50 tons per year of organic compounds, sulfur oxides, nitrogen oxides, or PM_{10} shall pay a fee based on Schedule M. This fee is in addition to permit and other fees otherwise authorized to be collected from such facilities and shall be included as part of the annual permit renewal fees.

(Adopted 6/6/90; Amended 8/2/95; 6/7/00)

3-320 **Toxic Inventory Fees:** Any facility that emits one or more toxic air contaminants in

quantities above a minimum threshold level shall pay an annual fee based on Schedule N. This fee will be in addition to permit to operate, toxic surcharge, and other fees otherwise authorized to be collected from such facilities.

320.1 An applicant who qualifies as a small business under Regulation 3-209 shall pay a Toxic Inventory Fee as set out in Schedule N up to a maximum fee of ~~$8,131~~$8,944 per year.

(Adopted 10/21/92; Amended 5/19/99; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/20/09; 6/16/10)

3-321 **Deleted December 2, 1998**

3-322 **Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees:** Persons submitting a written notification for a given site to conduct either excavation of contaminated soil or removal of underground storage tanks as required by Regulation 8, Rule 40, Section 401, 402, 403 or 405 shall pay a fee based on Schedule Q.

(Adopted 1/5/94; Amended 8/2/95; 5/21/03)

3-323 **Pre-Certification Fees:** An applicant seeking to pre-certify a source, in accordance with Regulation 2, Rule 1, Section 415, shall pay the filing fee, initial fee and permit to operate fee given in the appropriate schedule.

(Adopted June 7, 1995)

3-324 **Deleted June 7, 2000**

3-325 **Deleted December 2, 1998**

3-326 **Deleted December 2, 1998**

3-327 **Permit to Operate, Renewal Fees:** After the expiration of the initial permit to operate, the permit to operate shall be renewed on an annual basis or other time period as approved by the APCO. The fee required for the renewal of a permit to operate is the permit to operate fee and toxic surcharge listed in Schedules B, C, D, E, F, H, I, and K, prorated for the period of coverage. When more than one of the schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. This renewal fee is applicable to all sources required to obtain permits to operate in accordance with District regulations. The permit renewal invoice shall also specify any applicable major stationary source fees based on Schedule M, toxic inventory fees based on Schedule N, major facility review fees based on Schedule P, and greenhouse gas fees based on Schedule T. Where applicable, renewal fees shall be based on actual usage or emission levels that have been reported to or calculated by the District. In addition to these renewal fees for the sources at a facility, the facility shall also pay a processing fee at the time of renewal as follows:

327.1 ~~$70~~$77 for facilities with one permitted source, including gasoline dispensing facilities,

327.2 ~~$137~~$151 for facilities with 2 to 5 permitted sources,

327.3 ~~$274~~$301 for facilities with 6 to 10 permitted sources,

327.4 ~~$411~~$452 for facilities with 11 to 15 permitted sources,

327.5 ~~$546~~$601 for facilities with 16 to 20 permitted sources,

327.6 ~~$684~~$752 for facilities with more than 20 permitted sources.

(Adopted 6/7/00; Amended 6/2/04; 6/16/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

3-328 **Fee for OEHHA Risk Assessment Reviews:** Any facility that submits a health risk assessment to the District in accordance with Section 44361 of the California Health and Safety Code shall pay any fee requested by the State Office of Environmental Health Hazard Assessment (OEHHA) for reimbursement of that agency's costs incurred in reviewing the risk assessment.

(Adopted June 7, 2000)

3-329 **Fee for Risk Screening**: A health risk screening analysis (HRSA) required pursuant to Regulation 2, Rule 5 shall be subject to an appropriate Risk Screening Fee pursuant to Regulation 3-302 and Schedules B, C, D, E, F, H, I or K. In addition, any person that requests that the District prepare or review an HRSA (e.g., for determination of permit exemption in accordance with Regulations 2-1-316, 2-5-301 and 2-5-302; or for determination of exemption from emission control requirements pursuant to Regulation 8-47-113 and 8-47-402) shall pay a Risk Screening Fee.

(Adopted June 15, 2005)

3-330 **Fee for Renewing an Authority to Construct:** An applicant seeking to renew an authority to construct in accordance with Regulation 2-1-407 shall pay a fee of 50% of the initial fee in effect at the time of the renewal. If the District determines that an authority to construct cannot be renewed, any fees paid under this section shall be credited in full against the fee for a new authority to construct for functionally equivalent equipment submitted within six months of the date the original authority to construct expires.

(Adopted June 15, 2005)

3-331 **Registration Fees:** Any person who is required to register equipment under District rules shall submit a registration fee, and any annual fee thereafter, as set out in Schedule R. The APCO may reduce registration fees by an amount deemed appropriate if the owner or operator of the equipment attends an Industry Compliance School sponsored by the District.

(Adopted June 6, 2007; Amended 6/16/10)

3-332 **Naturally Occurring Asbestos Fees**: After July 1, 2007, any person required to submit an Asbestos Dust Mitigation Plan (ADMP) pursuant to Title 17 of the California Code of Regulations, Section 93105, Asbestos Air Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations shall pay the fee(s) set out in Schedule S.

(Adopted June 6, 2007)

3-333 **Major Facility Review (MFR) and Synthetic Minor Application Fees**: Any facility that applies for, or is required to undergo, an initial MFR permit, an amendment to an MFR permit, a minor or significant revision to an MFR permit, a reopening of an MFR permit, a renewal of an MFR permit, an initial synthetic minor operating permit, or a revision to a synthetic minor operating permit, shall pay the applicable fees set forth in Schedule P.

(Adopted May 21, 2008)

3-334 **Greenhouse Gas Fees:** Any permitted facility with greenhouse gas emissions shall pay a fee based on Schedule T. This fee is in addition to permit and other fees otherwise authorized to be collected from such facilities, and shall be included as part of the annual permit renewal fees.

(Adopted May 21, 2008)

3-335 **Indirect Source Review Fees:** Applicants that must file an Air Quality Impact Assessment pursuant to District rules for a project that is deemed to be an indirect source shall pay a fee based on Schedule U.

(Adopted May 20, 2009)

3-400 **ADMINISTRATIVE REQUIREMENTS**

3-401 **Permits:** Definitions, standards, and conditions contained in Regulation 2, Permits, are applicable to this regulation.

3-402 **Single Anniversary Date:** The APCO may assign a single anniversary date to a facility on which all its renewable permits to operate expire and will require renewal. Fees will be prorated to compensate for different time periods resulting from change in anniversary date.

3-403 **Change in Operating Parameters:** See Section 2-1-404 of Regulation 2, Rule 1.

3-404 **Deleted June 7, 2000**

3-405 **Fees Not Paid:** If an applicant or owner/operator fails to pay the fees specified on the invoice by the due date, the following procedure(s) shall apply:

405.1 Authority to Construct: The application will be cancelled, but can be reactivated upon payment of fees.

405.2 New Permit to Operate: The Permit to Operate shall not be issued, and the facility will be notified that operation, including startup, is not authorized.

2.1 Fees received during the first 30 days following the due date must include an additional late fee equal to 10 percent of all fees specified on the invoice.

2.2 Fees received more than 30 days after the due date must include an additional late fee equal to 50 percent of all fees specified on the invoice.

405.3 Renewal of Permit to Operate: The facility will be notified that the permit has lapsed and that further operation is no longer authorized. Reinstatement of lapsed Permits to Operate will require the payment of reinstatement fees in addition to all fees

specified on the invoice. Fees shall be calculated using fee schedules in effect at either the time of reinstatement or at the time additional fees are assessed under subsection 3-405.2.

3.1 Fees received during the first 30 days following the due date must include all fees specified on the invoice plus a reinstatement fee equal to 10 percent of all fees specified on the invoice.

3.2 Fees received more than 30 days after the due date, but less than one year after the due date, must include all fees specified on the invoice plus a reinstatement fee equal to 50 percent of all fees specified on the invoice.

405.4 Other Fees: Persons who have not paid the fee by the invoice due date, shall pay a late fee in addition to the original invoiced fee. Fees shall be calculated using fee schedules in effect at the time of the fees' original determination.

4.1 Fees received more than 30 days after the invoice due date must include a late fee of 10 percent of the original invoiced fee.

(Amended 7/6/83; 6/4/86; 11/5/86; 2/15/89; 6/6/90; 7/3/91; 8/2/95; 12/2/98; 6/15/05; 6/7/06)

3-406 Deleted June 4, 1986

3-407 Deleted August 2, 1995

3-408 Permit to Operate Valid for 12 Months: A Permit to Operate is valid for 12 months from the date of issuance or other time period as approved by the APCO.

(Amended 6/4/86; Amended 6/7/00)

3-409 Deleted June 7, 2000

3-410 Deleted August 2, 1995

3-411 Advance Deposit of Funds: The APCO may require that at the time of the filing of an application for an Authority to Construct for a project for which the District is a lead agency under the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), the applicant shall make an advance deposit of funds, in an amount to be specified by the APCO, to cover the costs which the District estimates to incur in connection with the District's performance of its environmental evaluation and the preparation of any required environmental documentation. In the event the APCO requires such an estimated advance payment to be made, the applicant will be provided with a full accounting of the costs actually incurred by the District in connection with the District's performance of its environmental evaluation and the preparation of any required environmental documentation.

(Adopted 12/18/85; Amended 8/2/95)

3-412 Deleted December 2, 1998

3-413 Toxic "Hot Spots" Information and Assessment Act Revenues: No later than 120 days after the adoption of this regulation, the APCO shall transmit to the California Air Resources Board, for deposit into the Air Toxics "Hot Spots" Information and Assessment Fund, the revenues determined by the ARB to be the District's share of statewide Air Toxics "Hot Spot" Information and Assessment Act expenses.

(Adopted October 21, 1992)

3-414 Deleted December 2, 1998

3-415 Failure to Pay - Further Actions: When an applicant or owner/operator fails to pay the fees specified on the invoice by the due date, the APCO may take the following actions against the applicant or owner/operator:

415.1 Issuance of a Notice to Comply.

415.2 Issuance of a Notice of Violation.

415.3 Revocation of an existing Permit to Operate. The APCO shall initiate proceedings to revoke permits to operate for any person who is delinquent for more than one month. The revocation process shall continue until payment in full is made or until permits are revoked.

415.4 The withholding of any other District services as deemed appropriate until payment in full is made.

(Adopted 8/2/95; Amended 12/2/98; 6/15/05)

3-416 Adjustment of Fees: The APCO or designees may, upon finding administrative error by District staff in the calculation, imposition, noticing, invoicing, and/or collection of any fee set

forth in this rule, rescind, reduce, increase, or modify the fee. A request for such relief from an administrative error, accompanied by a statement of why such relief should be granted, must be received within two years from the date of payment.

(Adopted October 8, 1997)

3-417 **Temporary Amnesty for Unpermitted and Unregistered Sources:** The APCO has the authority to declare an amnesty period, during which the District may waive all or part of the back fees and/or late fees for sources that are currently operating without valid Permits to Operate and/or equipment registrations.

(Adopted June 16, 2010)

SCHEDULE A
HEARING BOARD FEES[1]
Established by the Board of Directors December 7, 1977 Resolution No. 1046
(Code section references are to the California Health & Safety Code, unless otherwise indicated)

		Large Companies	Small Business	Third Party
1.	For each application for variance exceeding 90 days, in accordance with §42350, including applications on behalf of a class of applicants, which meet the requirements of the Hearing Board Rules for a valid and proper class action for variance..... Plus, for each hearing in addition to the first hearing necessary to dispose of said variance application in accordance with §42350, the additional sum of.....	~~$2407~~ $2744 ~~$1204~~ $1373	~~$360~~ $410 ~~$121~~ $138	
2.	For each application for variance not exceeding 90 days, in accordance with §42350, including applications on behalf of a class of applicants, which meet the requirements of the Hearing Board Rules for a valid and proper class action for variance..... Plus, for each hearing in addition to the first hearing necessary to dispose of said variance application, in accordance with §42350, the additional sum of.....	~~$1446~~ $1648 ~~$721~~ $822	~~$360~~ $410 ~~$121~~ $138	
3.	For each application to modify a variance in accordance with §42356.... Plus, for each hearing in addition to the first hearing on said application to modify a variance, in accordance with §42345, necessary to dispose of the application, the additional sum of	~~$960~~ $1094 ~~$721~~ $822	~~$121~~ $138 ~~$121~~ $138	
4.	For each application to extend a variance, in accordance with §42357... Plus, for each hearing in addition to the first hearing on an application to extend a variance, in accordance with §42357, necessary to dispose of the application, the additional sum of	~~$960~~ $1094 ~~$721~~ $822	~~$121~~ $138 ~~$121~~ $138	
5.	For each application to revoke a variance.....	~~$1446~~ $1648	~~$121~~ $138	
6.	For each application for approval of a Schedule of Increments of Progress in accordance with §41703.....	~~$960~~ $1094	~~$121~~ $138	
7.	For each application for variance in accordance with §41703, which exceeds 90 days..... Plus, for each hearing in addition to the first hearing on said application for variance in accordance with §41703, the additional sum of.....	~~$2407~~ $2744 ~~$1204~~ $1373	~~$360~~ $410 ~~$121~~ $138	
8.	For each application for variance in accordance with §41703, not to exceed 90 days..... Plus, for each hearing in addition to the hearing on said application for a variance in accordance with §41703, the additional sum of	~~$1446~~ $1648 ~~$721~~ $822	~~$360~~ $410 ~~$121~~ $138	

		Large Companies	Small Business	Third Party
9.	For each Appeal (Permit, Banking, Title V)	~~$2407~~ $2744 per hearing day	~~$1204~~ $1373 per hearing day	~~$1204~~ $1373 for entire appeal period
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.6 & 4.6	~~$1204~~ $1373	~~$242~~ $276	
11.	For each application to Modify or Terminate an abatement order.....	~~$2407~~ $2744 per hearing day	~~$1204~~ $1373 per hearing day	
12.	For each application for an interim variance in accordance with §42351.	~~$1204~~ $1373	~~$242~~ $276	
13.	For each application for an emergency variance in accordance with §42359.5	~~$601~~ $685	~~$121~~ $138	
14.	For each application to rehear a Hearing Board decision in accordance with §40861.....	100% of previous fee charged	100% of previous fee charged	
15.	Excess emission fees	See Attachment I	See Attachment I	
16.	Miscellaneous filing fee for any hearing not covered above	~~$1204~~ $1373	~~$360~~ $410	~~$360~~ $410
17.	For each published Notice of Public Hearing	Cost of Publication	$0	$0
18.	Court Reporter Fee (to be paid only if Court Reporter required for hearing).....	Actual Appearance and Transcript costs per hearing solely dedicated to one Docket	$0	Actual Appearance and Transcript costs per hearing solely dedicated to one Docket

NOTE 1 Any ~~person who certifies under penalty of perjury that~~ applicant who believes they have a hardship for payment of ~~the foregoing~~ fees ~~will cause an unreasonable hardship,~~ may ~~be excused from the payment of fees by order of~~request a fee waiver from the Hearing Board ~~on that account~~ pursuant to Hearing Board Rules.

(Amended 10/8/97; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE A
ATTACHMENT I
EXCESS EMISSION FEE

A. General

(1) Each applicant or petitioner for a variance from these Rules and Regulations shall pay to the Clerk or Deputy Clerk of the Hearing Board, in addition to the other filing fees required in Schedule A, an emission fee based on the total weight of emissions discharged, per source or product, other than those described in division (B) below, during the variance period in excess of that allowed by these rules in accordance with the schedule set forth in Table I.

(2) Where the total weight of emission discharged cannot be easily calculated, the petitioner shall work in concert with District staff to establish the amount of excess emissions to be paid.

(3) In the event that more than one rule limiting the discharge of the same contaminant is violated, the excess emission fee shall consist of the fee for violation which will result in the payment of the greatest sum. For the purposes of this subdivision, opacity rules and particulate mass emissions shall not be considered rules limiting the discharge of the same contaminant.

B. Excess Visible Emission Fee

Each applicant or petitioner for a variance from Regulation 6 or Health and Safety Code Section 41701 shall pay to the Clerk or Deputy Clerk of the Hearing Board, in addition to the filing fees required in Schedule A and the excess emission fees required in (A) above (if any), an emission fee based on the difference between the percent opacity allowed by Regulation 6 and the percent opacity of the emissions allowed from the source or sources operating under the variance, in accordance with the schedule set forth in Table II.

In the event that an applicant or petitioner is exempt from the provisions of Regulation 6, the applicant or petitioner shall pay a fee calculated as described herein above, but such fee shall be calculated based upon the difference between the opacity allowed under the variance and the opacity allowed under the provisions of Health and Safety Code Section 41701, in accordance with the schedule set forth in Table II.

C. Applicability

The provisions of subdivision (A) shall apply to all variances that generate excess emissions.

D. Fee Determination

(1) The excess emission fees shall be calculated by the petitioner based upon the requested number of days of operation under variance multiplied by the expected excess emissions as set forth in subdivisions (A) and (B) above. The calculations and proposed fees shall be set forth in the petition.

(2) The Hearing Board may adjust the excess emission fee required by subdivisions (A) and (B) of this rule based on evidence regarding emissions presented at the time of the hearing.

E. Small Businesses

(1) A small business shall be assessed twenty percent (20%) of the fees required by subdivisions (A) and (B), whichever is applicable. "Small business" is defined in the Fee Regulation.

(2) Request for exception as a small business shall be made by the petitioner under penalty of perjury on a declaration form provided by the Executive Officer which shall be submitted to the Clerk or Deputy Clerk of the Hearing Board at the time of filing a petition for variance.

F. Group, Class and Product Variance Fees

Each petitioner included in a petition for a group, class or product variance shall pay the filing fee specified in Schedule A, and the excess emission fees specified in subdivisions (A) and (B), whichever is applicable.

G. Adjustment of Fees

If after the term of a variance for which emission fees have been paid, petitioner can establish, to the satisfaction of the Executive Officer/APCO, that emissions were actually less than those upon which the fee was based, a pro rata refund shall be made.

H. Fee Payment/Variance Invalidation

(1) Excess emission fees required by subdivisions (A) and (B), based on an estimate provided during the variance Hearing, are due and payable within fifteen (15) days of the granting of the variance. The petitioner shall be notified in writing of any adjustment to the amount of excess emission fees due, following District staff's verification of the estimated emissions. Fee payments to be made as a result of an adjustment are due and payable within fifteen (15) days of notification of the amount due.

(2) Failure to pay the excess emission fees required by subdivisions (A) and (B) within fifteen (15) days of notification that a fee is due shall automatically invalidate the variance. Such notification may be given by personal service or by deposit, postpaid, in the United States mail and shall be due fifteen (15) days from the date of personal service or mailing. For the purpose of this rule, the fee payment shall be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date.

TABLE I
SCHEDULE OF EXCESS EMISSIONS FEES

Air Contaminants	All at ~~$2.31~~$2.63 Per Pound

Organic gases, except methane and those containing sulfur
Carbon Monoxide
Oxides of nitrogen (expressed as nitrogen dioxide)
Gaseous sulfur compounds (expressed as sulfur dioxide)
Particulate matter

Toxic Air Contaminants	All at ~~$11.47~~$13.08 Per Pound

Asbestos
Benzene
Cadmium
Carbon tetrachloride
Chlorinated dioxins and dibenzofurans (15 species)
Ethylene dibromide
Ethylene dichloride
Ethylene oxide
Formaldehyde
Hexavalent chromium
Methylene chloride
Nickel
Perchloroethylene
1,3-Butadiene
Inorganic arsenic
Beryllium
Polynuclear aromatic hydrocarbons (PAH)
Vinyl chloride
Lead
1,4-Dioxane
Trichloroethylene

TABLE II
SCHEDULE OF EXCESS VISIBLE EMISSION FEE

For each source with opacity emissions in excess of twenty percent (20%), but less than forty percent (40%) (where the source is in violation of Regulation 6, the fee is calculated as follows:

Fee = (Opacity* equivalent - 20) x number of days allowed in variance x ~~$2.57~~$2.93

For each source with opacity emissions in excess of forty percent (40%) (where the source is in violation of Regulation 6 and California Health and Safety Code Section 41701), the fee is calculated as follows:

Fee = (Opacity* equivalent - 40) x number of days allowed by variance x ~~$2.57~~$2.93

* Where "Opacity" equals maximum opacity of emissions in percent (not decimal equivalent) allowed by the variance. Where the emissions are darker than the degree of darkness equivalent to the allowed Ringelmann number, the percentage equivalent of the excess degree of darkness shall be used as "opacity."

(Adopted 6/7/00; Amended 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE B
COMBUSTION OF FUEL

(Adopted June 18, 1980)

For each source that burns fuel, which is not a flare and not exempted by Regulation 2, Rule 1, the fee shall be computed based on the maximum gross combustion capacity (expressed as higher heating value, HHV) of the source.

1. INITIAL FEE: ~~$44.46~~$48.91 per MM BTU/HOUR
   a. The minimum fee per source is: ~~$237~~$261
   b. The maximum fee per source is: ~~$82,969~~$91,266
2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$354~~$389 plus ~~$44.46~~$48.91 per MM BTU/hr
   b. Minimum RSF for first TAC source: ~~$591~~$650
   c. RSF for each additional TAC source: ~~$44.46~~$48.91 per MM BTU/Hr *
   d. Minimum RSF per additional TAC source: ~~$237~~$261 *
   e. Maximum RSF per source is: ~~$82,969~~$91,266
   * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1
3. PERMIT TO OPERATE FEE: ~~$22.23~~$24.45 per MM BTU/HOUR
   a. The minimum fee per source is: ~~$169~~$186
   b. The maximum fee per source is: ~~$41,483~~$45,631
4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.
5. ROUNDING: Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
6. Applicants for an authority to construct and permit to operate a project, which burns municipal waste or refuse-derived fuel, shall pay in addition to all required fees, an additional fee to cover the costs incurred by the State Department of Health Services, and/or a qualified contractor designated by the State Department of Health Services, in reviewing a risk assessment as required under H&S Code Section 42315. The fee shall be transmitted by the District to the Department of Health Services and/or the qualified contractor upon completion of the review and submission of comments in writing to the District.
7. A surcharge equal to 100% of all required initial and permit to operate fees shall be charged for sources permitted to burn one or more of the following fuels: coke, coal, wood, tires, black liquor, and municipal solid waste.

NOTE: MM BTU is million BTU of higher heat value
One MM BTU/HR = 1.06 gigajoules/HR

(Amended 6/5/85; 6/4/86; 3/4/87; 6/6/90; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 7/1/98;5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE C
STATIONARY CONTAINERS FOR THE STORAGE OF ORGANIC LIQUIDS
(Adopted June 18, 1980)

For each stationary container of organic liquids which is not exempted from permits by Regulation 2 and which is not part of a gasoline dispensing facility, the fee shall be computed based on the container volume, as follows:

1. INITIAL FEE: 0.173 cents per gallon
   a. The minimum fee per source is: $191
   b. The maximum fee per source is: $26,046
2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$354~~$389 plus 0.173 cents per gallon
   b. Minimum RSF for first TAC source: $545
   c. RSF for each additional TAC source: 0.173 cents per gallon *
   d. Minimum RSF per additional TAC source: $191 *
   e. Maximum RSF per source is: $26,046
   * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1
3. PERMIT TO OPERATE FEE: 0.087 cents per gallon
   a. The minimum fee per source is: $137
   b. The maximum fee per source is: $13,023
4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.
5. ROUNDING: Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(Amended 2/20/85; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/20/09; 6/16/10)

SCHEDULE D
GASOLINE TRANSFER AT GASOLINE DISPENSING FACILITIES, BULK PLANTS AND TERMINALS
(Adopted June 18, 1980)

A. All gasoline dispensing facilities shall pay the following fees:

1. INITIAL FEE: ~~$174.25~~$198.64 per single product nozzle (spn)
   ~~$174.25~~$198.64 per product for each multi-product nozzle (mpn)
2. PERMIT TO OPERATE FEE: ~~$66.74~~$76.08 per single product nozzle (spn)
   ~~$66.74~~$76.08 per product for each multi-product nozzle (mpn)
3. Initial fees and permit to operate fees for hardware modifications at a currently permitted gasoline dispensing facility shall be consolidated into a single fee calculated according to the following formula:

   ~~$240.99~~$274.72 × {[($mpn_{proposed}$)(products per nozzle) + $spn_{proposed}$] – [($mpn_{existing}$)(products per nozzle) + $spn_{existing}$]}
   mpn = multi-product nozzles
   spn = single product nozzles

   The above formula includes a toxic surcharge.

   If the above formula yields zero or negative results, no initial fees or permit to operate fees shall be charged.

   For the purposes of calculating the above fees, a fuel blended from two or more different grades shall be considered a separate product.

   Other modifications to facilities' equipment, including but not limited to tank addition/replacement/conversion, vapor recovery piping replacement, moving or extending pump islands, will not be subject to initial fees or permit to operate fees.
4. RISK SCREENING FEE (RSF) of ~~$354~~$389 per application is only applicable to projects for which a health risk screening analysis is required under Regulation 2-5-401 [including increases in permitted throughput for which a health risk screening analysis is required.]
5. Nozzles used exclusively for the delivery of diesel fuel or other fuels exempt from permits shall pay no fee. Multi-product nozzles used to deliver both exempt and non-exempt fuels shall pay fees for the non-exempt products only.

B. All bulk plants, terminals or other facilities using loading racks to transfer gasoline or gasohol into trucks, railcars or ships shall pay the following fees:

1. INITIAL FEE: ~~$2,289~~$2,609 per single product loading arm
   ~~$2,289~~$2,609 per product for multi-product arms
2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$2,643~~$2,998
   b. RSF for each additional TAC source: ~~$2,289~~$2,609 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1
3. PERMIT TO OPERATE FEE: ~~$638~~$727 per single product loading arm
   ~~$638~~$727 per product for multi-product arms

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

C. Fees in (A) above are in lieu of tank fees. Fees in (B) above are in addition to tank fees.

D. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(Amended 2/20/85; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE E
SOLVENT EVAPORATING SOURCES
(Adopted June 18, 1980)

For each solvent evaporating source, as defined in Section 3-210 except for dry cleaners, the fee shall be computed based on the net amount of organic solvent processed through the sources on an annual basis (or anticipated to be processed, for new sources) including solvent used for the cleaning of the sources.

1. INITIAL FEE:
   a. The minimum fee per source is: ~~$383~~$437
   b. If usage is not more than 1,000 gallons/year: ~~$383~~$437
   c. If usage is more than 1,000 gallons/year: ~~$771~~$879 per 1,000 gallons
   d. The maximum fee per source is: ~~$30,645~~$34,935

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$354~~$389 plus initial fee
   b. Minimum RSF for first TAC source: ~~$737~~$826
   c. RSF for each additional TAC source: equal to initial fee *
   d. Minimum RSF per additional TAC source: ~~$383~~$437 *
   e. Maximum RSF per source is: ~~$30,645~~$34,935
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE:
   a. The minimum fee per source is: ~~$276~~$315
   b. If usage is not more than 1,000 gallons/year: ~~$276~~$315
   c. If usage is more than 1,000 gallons/year: ~~$383~~$437 per 1,000 gallons
   d. The maximum fee per source is: ~~$15,321~~$17,466

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

5. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(Amended 5/19/82; 10/17/84; 6/5/85; 6/4/86; 10/8/87; 7/3/91; 6/15/94; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE F
MISCELLANEOUS SOURCES
(Adopted June 18, 1980)

For each source not governed by Schedules B, C, D, E, H or I, (except for those sources in the special classification lists, G-1 - G-5) the fees are:

1. INITIAL FEE: ~~$344~~$378

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$698~~$767
   b. RSF for each additional TAC source: ~~$344~~$378 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: ~~$249~~$274

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1. List of special classifications requiring graduated fees is shown in Schedules G-1, G-2, G-3, G-4, and G-5.

G-1. FEES FOR SCHEDULE G-1, For each source in a G-1 classification, fees are:

1. INITIAL FEE: ~~$2,120~~$2,374

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$2,474~~$2,763
   b. RSF for each additional TAC source: ~~$2,120~~$2,374 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: ~~$1,058~~$1,185

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-2. FEES FOR SCHEDULE G-2, For each source in a G-2 classification, fees are:

1. INITIAL FEE: ~~$2,997~~$3,417

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$3,351~~$3,806
   b. RSF for each additional TAC source: ~~$2,997~~$3,417 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: ~~$1,497~~$1,707

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be

raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-3. FEES FOR SCHEDULE G-3, For each source in a G-3 classification, fees are:

1. INITIAL FEE: ~~$17,393~~$19,828

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$17,747~~$20,217
   b. RSF for each additional TAC source: ~~$17,393~~$19,828 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: ~~$8,696~~$9,913

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-4. FEES FOR SCHEDULE G-4, For each source in a G-4 classification, fees are:

1. INITIAL FEE: $49,702

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$50,056~~$50,091
   b. RSF for each additional TAC source: $49,702 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $24,850

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-5. FEES FOR SCHEDULE G-5, For each source in a G-5 classification, fees are:

1. INITIAL FEE: ~~$39,136~~$43,050

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$39,489~~$43,439
   b. RSF for each additional TAC source: ~~$39,136~~$43,050 *
      * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: ~~$19,567~~$21,524

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

(Amended 5/19/82; 6/5/85; 6/4/86; 6/6/90; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00 6/6/01, 5/1/02, 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE G-1
(Adopted June 18, 1980)

Equipment or Process Description	Materials Processed or Produced
Asphalt Roofing Manufacturing – Asphalt Dipping	Asphalt Roofing or Related Materials
Calcining Kilns, excluding those processing cement, lime, or coke (see G-4 for cement, lime, or coke Calcining Kilns)	Any Materials except cement, lime, or coke
Chemical Manufacturing, Inorganic – Processing Units with a Capacity of 1000 Gallons/Hour or more	Any Inorganic Materials
Chemical Manufacturing, Inorganic – Processing Units with a Capacity of 5 Tons/Hour or more	Any Inorganic Materials
Chemical Manufacturing, Inorganic – Reactors with a Capacity of 1000 Gallons or more	Any Inorganic Materials
Chemical Manufacturing, Organic – Latex Dipping	Any latex materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 1000 Gallons/Hour or more	Any Organic Materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 5 Tons/Hour or more	Any Organic Materials
Chemical Manufacturing, Organic – Reactors with a Capacity of 1000 Gallons or more	Any Organic Materials
Compost Operations – Windrows, Static Piles, Aerated Static Piles, In-Vessel, or similar methods	Any waste materials such as yard waste, food waste, agricultural waste, mixed green waste, bio-solids, animal manures, etc.
Crushers	Any minerals or mineral products such as rock, aggregate, cement, concrete, or glass; waste products such as building or road construction debris; and any wood, wood waste, green waste; or similar materials
Electroplating Equipment	Hexavalent Decorative Chrome with permitted capacity greater than 500,000 amp-hours per year or Hard Chrome

Equipment or Process Description	Materials Processed or Produced
Foil Manufacturing – Any Converting or Rolling Lines	Any Metal or Alloy Foils
Galvanizing Equipment	Any
Glass Manufacturing – Batching Processes including storage and weigh hoppers or bins, conveyors, and elevators	Any Dry Materials
Glass Manufacturing – Mixers	Any Dry Materials
Glass Manufacturing – Molten Glass Holding Tanks	Any molten glass
Grinders	Any minerals or mineral products such as rock, aggregate, cement, concrete, or glass; waste products such as building or road construction debris; and any wood, wood waste, green waste; or similar materials
Incinerators – Crematory	Human and/or animal remains
Incinerators – Flares	Any waste gases
Incinerators – Other (see G-2 for hazardous or municipal solid waste incinerators, see G-3 for medical or infectious waste incinerators)	Any Materials except hazardous wastes, municipal solid waste, medical or infectious waste
Incinerators – Pathological Waste (see G-3 for medical or infectious waste incinerators)	Pathological waste only
Loading and/or Unloading Operations – Bulk Plants and Bulk Terminals, excluding those loading gasoline or gasohol (see Schedule D for Bulk Plants and Terminals loading gasoline or gasohol)	Any Organic Materials except gasoline or gasohol
Petroleum Refining – Alkylation Units	Any Hydrocarbons
Petroleum Refining – Asphalt Oxidizers	Any Hydrocarbons
Petroleum Refining – Benzene Saturation Units/Plants	Any Hydrocarbons
Petroleum Refining – Catalytic Reforming Units	Any Hydrocarbons
Petroleum Refining – Chemical Treating Units including alkane, naphthenic acid, and naptha merox treating, or similar processes	Any Hydrocarbons
Petroleum Refining – Converting Units including Dimersol Plants, Hydrocarbon Splitters, or similar processes	Any Hydrocarbons

Equipment or Process Description	Materials Processed or Produced
Petroleum Refining – Distillation Units, excluding crude oil units with capacity > 1000 barrels/hour (see G-3 for > 1000 barrels/hour crude distillation units)	Any Hydrocarbons
Petroleum Refining – Hydrogen Manufacturing	Hydrogen or Any Hydrocarbons
Petroleum Refining – Hydrotreating or Hydrofining	Any Hydrocarbons
Petroleum Refining – Isomerization	Any Hydrocarbons
Petroleum Refining – MTBE Process Units/Plants	Any Hydrocarbons
Petroleum Refining – Sludge Converter	Any Petroleum Waste Materials
Petroleum Refining – Solvent Extraction	Any Hydrocarbons
Petroleum Refining – Sour Water Stripping	Any Petroleum Process or Waste Water
Petroleum Refining – Storage (enclosed)	Petroleum Coke or Coke Products
Petroleum Refining – Waste Gas Flares (not subject to Regulation 12, Rule 11)	Any Petroleum Refining Gases
Petroleum Refining – Miscellaneous Other Process Units	Any Hydrocarbons
Remediation Operations, Groundwater – Strippers	Contaminated Groundwater
Remediation Operations, Soil – Any Equipment	Contaminated Soil
Spray Dryers	Any Materials
Sterilization Equipment	Ethylene Oxide
Wastewater Treatment, Industrial – Oil-Water Separators, excluding oil-water separators at petroleum refineries (see G-2 for Petroleum Refining - Oil-Water Separators)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Industrial – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment and excluding strippers at petroleum refineries (see G-2 for Petroleum Refining – Strippers)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Industrial - Storage Ponds, excluding storage ponds at petroleum refineries (see G-2 for Petroleum Refining – Storage Ponds)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Municipal – Preliminary Treatment	Municipal Wastewater
Wastewater Treatment, Municipal – Primary Treatment	Municipal Wastewater
Wastewater Treatment, Municipal –	Municipal Wastewater

Equipment or Process Description	Materials Processed or Produced
Digesters	
Wastewater Treatment, Municipal – Sludge Handling Processes, excluding sludge incinerators (see G-2 for sludge incinerators)	Sewage Sludge

(Amended 6/4/86; 6/6/90; 5/19/99; 6/7/00; 6/2/04; 6/15/05)

SCHEDULE G-2
(Adopted June 6, 1990)

Equipment or Process Description	Materials Processed or Produced
Asphalt Roofing Manufacturing – Asphalt Blowing	Asphalt Roofing or Related Materials
Asphaltic Concrete Manufacturing – Aggregate Dryers	Any Dry Materials
Asphaltic Concrete Manufacturing – Batch Mixers	Any Asphaltic Concrete Products
Asphaltic Concrete Manufacturing – Drum Mixers	Any Asphaltic Concrete Products
Asphaltic Concrete Manufacturing – Other Mixers and/or Dryers	Any Dry Materials or Asphaltic Concrete Products
Concrete or Cement Batching Operations – Mixers	Any cement, concrete, or stone products or similar materials
Furnaces – Electric	Any Mineral or Mineral Product
Furnaces – Electric Induction	Any Mineral or Mineral Product
Furnaces – Glass Manufacturing	Soda Lime only
Furnaces – Reverberatory	Any Ores, Minerals, Metals, Alloys, or Related Materials
Incinerators – Hazardous Waste including any unit required to have a RCRA permit	Any Liquid or Solid Hazardous Wastes
Incinerators – Solid Waste, excluding units burning human/animal remains or pathological waste exclusively (see G-1 for Crematory and Pathological Waste Incinerators)	Any Solid Waste including Sewage Sludge (except human/animal remains or pathological waste)
Metal Rolling Lines, excluding foil rolling lines (see G-1 for Foil Rolling Lines)	Any Metals or Alloys
Petroleum Refining – Stockpiles (open)	Petroleum Coke or coke products only
Petroleum Refining, Wastewater Treatment – Oil-Water Separators	Wastewater from petroleum refineries only
Petroleum Refining, Wastewater Treatment – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment	Wastewater from petroleum refineries only
Petroleum Refining, Wastewater Treatment – Storage Ponds	Wastewater from petroleum refineries only
Pickling Lines or Tanks	Any Metals or Alloys
Sulfate Pulping Operations – All Units	Any
Sulfite Pulping Operations – All Units	Any

(Amended June 7, 2000)

SCHEDULE G-3
(Adopted June 18, 1980)

Equipment or Process Description	Materials Processed or Produced
Furnaces – Electric Arc	Any Metals or Alloys
Furnaces – Electric Induction	Any Metals or Alloys
Incinerators – Medical Waste, excluding units burning pathological waste exclusively (see G-1 for Pathological Waste Incinerators)	Any Medical or Infectious Wastes
Loading and/or Unloading Operations – Marine Berths	Any Organic Materials
Petroleum Refining – Cracking Units including hydrocrackers and excluding thermal or fluid catalytic crackers (see G-4 for Thermal Crackers and Catalytic Crackers)	Any Hydrocarbons
Petroleum Refining – Distillation Units (crude oils) including any unit with a capacity greater than 1000 barrels/hour (see G-1 for other distillation units)	Any Petroleum Crude Oils
Phosphoric Acid Manufacturing – All Units (by any process)	Phosphoric Acid

(Amended 5/19/82; Amended and renumbered 6/6/90; Amended 6/7/00; 6/15/05; 5/2/07)

SCHEDULE G-4
(Adopted June 6, 1990)

Equipment or Process Description	Materials Processed or Produced
Acid Regeneration Units	Sulfuric or Hydrochloric Acid only
Annealing Lines (continuous only)	Metals and Alloys
Calcining Kilns (see G-1 for Calcining Kilns processing other materials)	Cement, Lime, or Coke only
Fluidized Bed Combustors	Solid Fuels only
Nitric Acid Manufacturing – Any Ammonia Oxidation Processes	Ammonia or Ammonia Compounds
Petroleum Refining - Coking Units including fluid cokers, delayed cokers, flexicokers, and coke kilns	Petroleum Coke and Coke Products
Petroleum Refining - Cracking Units including fluid catalytic crackers and thermal crackers and excluding hydrocrackers (see G-3 for Hydrocracking Units)	Any Hydrocarbons
Petroleum Refining - Sulfur Removal including any Claus process or any other process requiring caustic reactants	Any Petroleum Refining Gas
Sulfuric Acid Manufacturing – Any Chamber or Contact Process	Any Solid, Liquid or Gaseous Fuels Containing Sulfur

(Amended June 7, 2000)

SCHEDULE G-5

Equipment or Process Description	Materials Processed or Produced
Petroleum Refinery Flares (subject to Regulation 12, Rule 11)	Any Petroleum Vent Gas (as defined in section 12-11-210 and section 12-12-213)

(Adopted May 2, 2007)

SCHEDULE H
SEMICONDUCTOR AND RELATED OPERATIONS
(Adopted May 19, 1982)

All of the equipment within a semiconductor fabrication area will be grouped together and considered one source. The fee shall be as indicated:

1. INITIAL FEE:
   a. The minimum fee per source is: ~~$335~~$382
   b. The maximum fee per source is: ~~$26,774~~$30,522

   The initial fee shall include the fees for each type of operation listed below, which is performed at the fabrication area:

   c. SOLVENT CLEANING OPERATIONS, such as usage of:

      Solvent Sinks (as defined in Regulation 8-30-214);
      Solvent Spray Stations (as defined in Regulation 8-30-221);
      Solvent Vapor Stations (as defined in Regulation 8-30-222); and
      Wipe Cleaning Operation (as defined in Regulation 8-30-225).
      The fee is based on the gross throughput of organic solvent processed through the solvent cleaning operations on an annual basis (or anticipated to be processed, for new sources):
      i. If gross throughput is not more than 3,000 gal/yr: ~~$335~~$382
      ii. If gross throughput is more than 3,000 gallons/year: ~~$226~~$258 per 1,000 gallon

   d. COATING OPERATIONS, such as application of:

      Photoresist (as defined in Regulation 8-30-215); other wafer coating;
      Solvent-Based Photoresist Developer (as defined in Regulation 8-30-219); and other miscellaneous solvent usage.
      The fee is based on the gross throughput of organic solvent processed through the coating operations on an annual basis (or anticipated to be processed, for new sources):
      i. If gross throughput is not more than 1,000 gal/yr: ~~$335~~$382
      ii. If gross throughput is more than 1,000 gallons/year: ~~$673~~$767 per 1,000 gallon

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$354~~$389 plus initial fee
   b. Minimum RSF for first TAC source: ~~$689~~$771
   c. RSF for each additional TAC source: equal to initial fee *
   d. Minimum RSF per additional TAC source: ~~$335~~$382 *
   e. Maximum RSF per source is: ~~$26,774~~$30,522

   * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE:
   a. The minimum fee per source is: ~~$242~~$276
   b. The maximum fee per source is: ~~$13,385~~$15,259

   The permit to operate fee shall include the fees for each type of operation listed below, which is performed at the fabrication area:

   c. SOLVENT CLEANING OPERATIONS, such as usage of:

      Solvent Sinks (as defined in Regulation 8-30-214);
      Solvent Spray Stations (as defined in Regulation 8-30-221);

Solvent Vapor Stations (as defined in Regulation 8-30-222); and
Wipe Cleaning Operation (as defined in Regulation 8-30-225).
The fee is based on the gross throughput of organic solvent processed through the solvent cleaning operations on an annual basis (or anticipated to be processed, for new sources):

i. If gross throughput is not more than 3,000 gal/yr: ~~$242~~$276
ii. If gross throughput is more than 3,000 gallons/year: ~~$113~~$129 per 1,000 gallon

d. COATING OPERATIONS, such as application of:

Photoresist (as defined in Regulation 8-30-215); other wafer coating;
Solvent-Based Photoresist Developer (as defined in Regulation 8-30-219); and other miscellaneous solvent usage.
The fee is based on the gross throughput of organic solvent processed through the coating operations on an annual basis (or anticipated to be processed, for new sources):

i. If gross throughput is not more than 1,000 gal/yr: ~~$242~~$276
ii. If gross throughput is more than 1,000 gallons/year: ~~$335~~$382 per 1,000 gallon

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

5. The fee for each source will be rounded to the whole dollar. Fees for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(Amended 1/9/85; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 10/20/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE I
DRY CLEANERS
(Adopted July 6, 1983)

For dry cleaners, the fee shall be computed based on each cleaning machine, except that machines with more than one drum shall be charged based on each drum, regardless of the type or quantity of solvent, as follows:

1. INITIAL FEE FOR A DRY CLEANING MACHINE (per drum):
   a. If the washing or drying capacity is no more than 100 pounds: ~~$344~~$392
   b. If the washing or drying capacity exceeds 100 pounds: ~~$344~~$392 plus
      For that portion of the capacity exceeding 100 pounds: ~~$10.27~~$11.71 per pound

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$354~~$389 plus initial fee
   b. Minimum RSF for first TAC source: ~~$698~~$781
   c. RSF for each additional TAC source: equal to initial fee *
   d. Minimum RSF per additional TAC source: ~~$344~~$392 *
   * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE FOR A DRY CLEANING MACHINE (per drum):
   a. If the washing or drying capacity is no more than 100 pounds: ~~$249~~$284
   b. If the washing or drying capacity exceeds 100 pounds: ~~$249~~$284 plus
      For that portion of the capacity exceeding 100 pounds: ~~$5.16~~$5.88 per pound

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

5. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(Amended 10/17/84; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03; 6/02/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:

~~a.~~	~~Inactive or Closed Solid Waste Disposal Sites~~	~~$2,296~~
~~b.~~	~~Active Solid Waste Disposal Sites~~	~~$4,592~~
a.	Landfill (Decomposition Process)	$2,617
b.	Active Landfill (Waste and Cover Material Dumping Process)	$1,309
c.	Active Landfill (Excavating, Bulldozing, and Compacting Processes)	$1,309

2. RISK SCREENING FEE (RSF) is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
   a. RSF for first TAC source in application: ~~$354~~$389 plus initial fee
   b. RSF for each additional TAC source: equal to initial fee *
   * RSF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE:

~~a.~~	~~Inactive or Closed Solid Waste Disposal Sites~~	~~$1,148~~
~~b.~~	~~Active Solid Waste Disposal Sites~~	~~$2,296~~
a.	Landfill (Decomposition Process)	$1,309
b.	Active Landfill (Waste and Cover Material Dumping Process)	$654
c.	Active Landfill (Excavating, Bulldozing, and Compacting Processes)	$654

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

5. Evaluation of Reports and Questionnaires:
   a. Evaluation of Solid Waste Air Assessment Test Report as required by Health & Safety Code Section 41805.5(g) ~~$1,380~~$1,573
   b. Evaluation of Inactive Site Questionnaire ~~evaluation~~ as required by Health & Safety Code Section 41805.5(b) ~~$692~~$789
   c. Evaluation of Solid Waste Air Assessment Test ~~r~~Report in conjunction with ~~e~~Evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b) ~~$692~~$789
   d. Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405 ~~$508~~$579
   e. Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407 ~~$1,455~~$1,659
   f. Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409 ~~$508~~$579
   g. Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411 ~~$1,274~~$1,452

6. Fees for each source will be rounded off to the nearest dollar. The fee for sources will be rounded up or down to the nearest dollar.

7. For the purposes of this fee schedule, a ~~solid waste disposal site~~ landfill shall be considered active, if it has accepted solid waste for disposal at any time during the previous 12 months or has plans to accept solid waste for disposal during the next 12 months.

(Amended 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 10/6/99; 6/7/00; 6/6/01; 5/1/02, 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE L
ASBESTOS OPERATIONS
(Adopted July 6, 1988)

1. Asbestos Operations conducted at single family dwellings are subject to the following fees:
   a. OPERATION FEE: ~~$116~~$130 for amounts 100 to 500 square feet or linear feet.
      ~~$428~~$479 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
      ~~$623~~$698 for amounts 1001 square feet or liner feet to 2000 square feet or linear feet.
      ~~$856~~$959 for amounts greater than 2000 square feet or linear feet.
   b. Cancellation: ~~$56~~$63 of above amounts non-refundable, for notification processing.

2. Asbestos Operations, other than those conducted at single family dwellings, are subject to the following fees:
   a. OPERATION FEE: ~~$330~~$370 for amounts 100 to 159 square feet or 100 to 259 linear feet or 35 cubic feet
      ~~$476~~$533 for amounts 160 square feet or 260 linear feet to 500 square or linear feet or greater than 35 cubic feet.
      ~~$692~~$775 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
      ~~$1,021~~$1,144 for amounts 1001 square feet or liner feet to 2500 square feet or linear feet.
      ~~$1,455~~$1,630 for amounts 2501 square feet or linear feet to 5000 square feet or linear feet.
      ~~$1,998~~$2,238 for amounts 5001 square feet or linear feet to 10000 square feet or linear feet.
      ~~$2,542~~$2,847 for amounts greater than 10000 square feet or linear feet.
   b. Cancellation: ~~$156~~$175 of above amounts non-refundable for notification processing.

3. Demolitions (including zero asbestos demolitions) conducted at a single-family dwelling are subject to the following fee:
   a. OPERATION FEE: ~~$56~~$63
   b. Cancellation: ~~$56~~$63 (100% of fee) non-refundable, for notification processing.

4. Demolitions (including zero asbestos demolitions) other than those conducted at a single family dwelling are subject to the following fee:
   a. OPERATION FEE: ~~$234~~$262
   b. Cancellation: ~~$156~~$175 of above amount non-refundable for notification processing.

5. Asbestos operations with less than 10 days prior notice (excluding emergencies) are subject to the following additional fee:
   a. OPERATION FEE: ~~$390~~$437

6. Asbestos demolition operations for the purpose of fire training are exempt from fees.

7. Floor mastic removal using mechanical buffers and solvent is subject to the following fee:
   a. OPERATION FEE: ~~$234~~$262
   b. Cancellation: ~~$156~~$175 of above amount non-refundable for notification processing.

(Amended 9/5/90; 1/5/94; 8/20/97; 10/7/98; 7/19/00; 8/1/01, 6/5/02, 7/2/03; 6/2/04; 6/6/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE M
MAJOR STATIONARY SOURCE FEES
(Adopted June 6, 1990)

For each major stationary source emitting 50 tons per year or more of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, and/or PM_{10}, the fee shall be based on the following:

1.	Organic Compounds	$105.81 per ton
2.	Sulfur Oxides	$105.81 per ton
3.	Nitrogen Oxides	$105.81 per ton
4.	PM_{10}	$105.81 per ton

Emissions calculated by the APCO shall be based on the data reported for the most recent 12-month period prior to billing. In calculating the fee amount, emissions of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, or PM_{10}, if occurring in an amount less than 50 tons per year, shall not be counted.

(Amended 7/3/91; 6/15/94; 7/1/98; 5/9/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE N
TOXIC INVENTORY FEES
(Adopted October 21, 1992)

For each stationary source emitting substances covered by California Health and Safety Code Section 44300 *et seq.*, the Air Toxics "Hot Spots" Information and Assessment Act of 1987, which have trigger levels listed in Table 2-5-1, a fee based on the weighted emissions of the facility shall be assessed based on the following formulas:

1. A fee of $5 for each gasoline product dispensing nozzle in the facility, if the facility is a Gasoline Dispensing Facility; or
2. A fee of ~~$75~~$82 if the facility has emissions in the current Toxic Emissions Inventory which are greater than or equal to 50 weighted pounds per year and less than 1000 weighted pounds per year; or
3. A fee of ~~$75~~$82 + $S_L \times (w_i - 1000)$ if the facility has emissions in the current Toxic Emissions Inventory which are greater than or equal to 1000 weighted pounds per year;

   where the following relationships hold:

w_i = facility weighted emissions for facility j; where the weighted emission for the facility shall be calculated as a sum of the individual emissions of the facility multiplied by either the inhalation cancer potency factor (CPF, in kilogram-day/milligram) for the substance times 28.6 if the emission is a carcinogen, or by the reciprocal of the inhalation chronic reference exposure level ($REL_{\cancel{c}}$) for the substance (in cubic meters/microgram) if the emission is not a carcinogen [use CPF and REL as listed in Table 2-5-1]:

w_j = Facility Weighted Emission = $\sum_{i=1}^{n} E_i * Q_i$ where

n = number of toxic substances emitted by facility
E_i = amount of substance i emitted by facility in lbs/year
Q_i = 28.6 * CPF, if i is a carcinogen; or
Q_i = $[REL_{\cancel{c}}]^{-1}$, if i is not a carcinogen

F_T = Total amount of fees to be collected by the District to cover District and State of California AB 2588 costs as most recently adopted by the Board of Directors of the California Environmental Protection Agency, Air Resources Board, and set out in the most recently published "Amendments to the Air Toxics "Hot Spots" Fee Regulation," published by that agency.

N_L = Number of facilities with emissions in current District Toxic Emissions Inventory greater than 1000 weighted pounds per year.

N_S = Number of facilities with emissions in current District Toxic Emissions Inventory greater than 50 weighted pounds per year and less than 1000 weighted pounds per year.

N_{NOZ} = Number of gasoline-product-dispensing nozzles in currently permitted Gasoline Dispensing Facilities.

S_L = Surcharge per pound of weighted emissions for each pound in excess of 1000 weighted pounds per year, where S_L is given by the following formula:

$$S_L = \frac{F_T - (\cancel{75}\underline{82} \times N_S) - (\cancel{75}\underline{82} \times N_L) - (5 \times N_{NOZ})}{\sum_{j=1}^{N_L} (w_j - 1000)}$$

(Amended 12/15/93; 6/15/05; 5/2/07; 6/16/10)

SCHEDULE P
MAJOR FACILITY REVIEW FEES
(Adopted November 3, 1993)

1. MFR / SYNTHETIC MINOR ANNUAL FEES

Each facility, which is required to undergo major facility review in accordance with the requirements of Regulation 2, Rule 6, shall pay annual fees (1a and 1b below) for each source holding a District Permit to Operate. These fees shall be in addition to and shall be paid in conjunction with the annual renewal fees paid by the facility. However, these MFR permit fees shall not be included in the basis to calculate Alternative Emission Control Plan (bubble) or toxic air contaminant surcharges. If a major facility applies for and obtains a synthetic minor operating permit, the requirement to pay the fees in 1a and 1b shall terminate as of the date the APCO issues the synthetic minor operating permit.

a. MFR SOURCE FEE ..... ~~$400~~$456 per source

b. MFR EMISSIONS FEE..... ~~$15.77~~$17.98 per ton of regulated air pollutants emitted

Each MFR facility and each synthetic minor facility shall pay an annual monitoring fee (1c below) for each pollutant measured by a District-approved continuous emission monitor or a District-approved parametric emission monitoring system.

c. MFR/SYNTHETIC MINOR MONITORING FEE~~$4,005~~$4,566 per monitor per pollutant

2. SYNTHETIC MINOR APPLICATION FEES

Each facility that applies for a synthetic minor operating permit or a revision to a synthetic minor operating permit shall pay application fees according to 2a and either 2b (for each source holding a District Permit to Operate) or 2c (for each source affected by the revision). If a major facility applies for a synthetic minor operating permit prior to the date on which it would become subject to the annual major facility review fee described above, the facility shall pay, in addition to the application fee, the equivalent of one year of annual fees for each source holding a District Permit to Operate.

a. SYNTHETIC MINOR FILING FEE ..... ~~$558~~$636 per application

b. SYNTHETIC MINOR INITIAL PERMIT FEE..... ~~$391~~$446 per source

c. SYNTHETIC MINOR REVISION FEE..... ~~$391~~$446 per source modified

3. MFR APPLICATION FEES

Each facility that applies for or is required to undergo: an initial MFR permit, an amendment to an MFR permit, a minor or significant revision to an MFR permit, a reopening of an MFR permit or a renewal of an MFR permit shall pay, with the application and in addition to any other fees required by this regulation, the applicable fees according to 3a-h below. The fees in 3b and 3g apply to each source in the initial or renewal permit, while the fees in 3d-f apply to each source affected by the revision or reopening.

a. MFR FILING FEE ..... ~~$558~~$636 per application

b. MFR INITIAL PERMIT FEE..... ~~$540~~$616 per source

c. MFR ADMINISTRATIVE AMENDMENT FEE..... ~~$158~~$180 per application

d. MFR MINOR REVISION FEE ..... ~~$792~~$903 per source modified

e. MFR SIGNIFICANT REVISION FEE ..... ~~$1,477~~$1,684 per source modified

f. MFR REOPENING FEE..... ~~$484~~$552 per source modified

g. MFR RENEWAL FEE..... ~~$235~~$268 per source

Each facility that requests a permit shield or a revision to a permit shield under the provisions of Regulation 2, Rule 6 shall pay the following fee for each source (or group of sources, if the requirements for these sources are grouped together in a single table in the MFR permit) that is covered by the requested shield. This fee shall be paid in addition to any other applicable fees.

h. MFR PERMIT SHIELD FEE..... ~~$833~~$950 per shielded source or group of sources

4. MFR PUBLIC NOTICE FEES

Each facility that is required to undergo a public notice related to any permit action pursuant to Regulation 2-6 shall pay the following fee upon receipt of a District invoice.

MFR PUBLIC NOTICE FEE ..... Cost of Publication

5. MFR PUBLIC HEARING FEES

If a public hearing is required for any MFR permit action, the facility shall pay the following fees upon receipt of a District invoice.

a. MFR PUBLIC HEARING FEE .... Cost of Public Hearing not to exceed ~~$9,621~~$10,968

b. NOTICE OF PUBLIC HEARING FEE ..... Cost of distributing Notice of Public Hearing

6. POTENTIAL TO EMIT DEMONSTRATION FEE

Each facility that makes a potential to emit demonstration under Regulation 2-6-312 in order to avoid the requirement for an MFR permit shall pay the following fee:

a. PTE DEMONSTRATION FEE..... ~~$95~~$108 per source, not to exceed ~~$9,370~~$10,682

(Amended 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03; 6/2/04; 6/15/05; 6/7/06; 5/2/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE Q
EXCAVATION OF CONTAMINATED SOIL AND
REMOVAL OF UNDERGROUND STORAGE TANKS
(Adopted January 5, 1994)

1. Persons excavating contaminated soil or removing underground storage tanks subject to the provisions of Regulation 8, Rule 40, Section 401, 402, 403 or 405 are subject to the following fee:
   a. OPERATION FEE: ~~$141~~$144

(Amended 7/19/00; 8/1/01, 6/5/02, 7/2/03; 6/2/04; 6/6/07; 5/21/08; 5/20/09; 6/16/10)

SCHEDULE R
EQUIPMENT REGISTRATION FEES

1. Persons operating commercial cooking equipment who are required to register equipment as required by District rules are subject to the following fees:
   a. Conveyorized Charbroiler REGISTRATION FEE: ~~$378~~$386 per facility
   b. Conveyorized Charbroiler ANNUAL RENEWAL FEE: ~~$105~~$107 per facility
   c. Under-fired Charbroiler REGISTRATION FEE: ~~$378~~$386 per facility
   d. Under-fired Charbroiler ANNUAL RENEWAL FEE: ~~$105~~$107 per facility

2. Persons operating non-halogenated dry cleaning equipment who are required to register equipment as required by District rules are subject to the following fees:
   a. Dry Cleaning Machine REGISTRATION FEE: ~~$189~~$193
   b. Dry Cleaning Machine ANNUAL RENEWAL FEE: ~~$131~~$134

3. Persons operating diesel engines who are required to register equipment as required by District or State rules are subject to the following fees:
   a. Diesel Engine REGISTRATION FEE: ~~$126~~$129
   b. Diesel Engine ANNUAL RENEWAL FEE: ~~$84~~$86
   c. Diesel Engine ALTERNATIVE COMPLIANCE PLAN FEE (for each plan submitted under District Regulation 11-17-402): $129

4. Persons operating boilers, steam generators and process heaters who are required to register equipment by District Regulation 9-7-404 are subject to the following fees:
   a. Each facility operating a boiler, steam generator or process heater subject to Regulation 9-7-404 ONE-TIME REGISTRATION FEE ~~$446~~$455 per facility
   b. Each boiler, steam generator or process heater subject to Regulation 9-7-404, after the first ONE-TIME REGISTRATION FEE ~~$53~~$54 per device

5. Persons owning or operating graphic arts operations who are required to register equipment by District Regulation 8-20-408 are subject to the following fees:
   a. REGISTRATION FEE: ~~$226~~$231
   b. ANNUAL RENEWAL FEE: ~~$142~~$145

6. Persons owning or operating mobile refinishing operations who are required to register by District Regulation 8-45-4 are subject to the following fees:
   a. REGISTRATION FEE ~~$105~~$107
   b, ANNUAL RENEWAL FEE ~~$63~~$64

(Adopted 7/6/07; Amended 12/5/07; 5/21/08; 7/30/08; 11/19/08; 12/3/08; 5/20/09; 6/16/10)

SCHEDULE S
NATURALLY OCCURRING ASBESTOS OPERATIONS

1. ASBESTOS DUST MITIGATION PLAN PROCESSING FEE:

   Any person submitting an Asbestos Dust Mitigation Plan (ADMP) for review of an Naturally Occurring Asbestos (NOA) project shall pay the following fee (including NOA Discovery Notifications which would trigger an ADMP review): ~~$280~~$319

2. AIR MONITORING PROCESSING FEE:

   NOA projects requiring an Air Monitoring component as part of the ADMP approval are subject to the following fee in addition to the ADMP fee: ~~$2,487~~$2,835

(Adopted 6/6/07; Amended 5/21/08; 5/20/09; 6/16/10)

SCHEDULE T
GREENHOUSE GAS FEES

For each permitted facility emitting greenhouse gases, the fee shall be based on the following:

1. Carbon Dioxide Equivalent (CDE) Emissions $0.048 per metric ton

Emissions calculated by the APCO shall be based on the data reported for the most recent 12-month period prior to billing. The annual emissions of each greenhouse gas (GHG) listed below shall be determined by the APCO for each permitted (i.e., non-exempt) source. For each emitted GHG, the CDE emissions shall be determined by multiplying the annual GHG emissions by the applicable Global Warming Potential (GWP) value. The GHG fee for each facility shall be based on the sum of the CDE emissions for all GHGs emitted by the facility, except that no fee shall be assessed for emissions of biogenic carbon dioxide.

Direct Global Warming Potential Relative to Carbon Dioxide*

GHG	GWP**
Carbon Dioxide	1
Methane	21
Nitrous Oxide	310
HCFC-22	1,500
HCFC-123	90
HCFC-124	470
HCFC-142b	1,800
HFC-23	11,700
HFC-32	650
HFC-125	2,800
HFC-134a	1,300
HFC-143a	3,800
HFC-152a	140
HFC-227ea	2,900
HFC-236fa	6,300
HFC-43-10-mee	1,300
PFC-14	6,500
PFC-116	9,200
PFC-218	7,000
PFC-318	8,700
PFC-3-1-10	7,000
PFC-5-1-14	7,400
Sulfur Hexafluoride	23,900

* Source: Intergovernmental Panel on Climate Change (Second Assessment Report: Climate Change 1995).

** GWPs compare the integrated radiative forcing over a specified period (i.e., 100 years) from a unit mass pulse emission to compare the potential climate change associated with emissions of different GHGs.

(Adopted 5/21/08; Amended 5/20/09; 6/16/10)

SCHEDULE U
INDIRECT SOURCE REVIEW FEES

The applicant for any project deemed an indirect source pursuant to District rules shall be subject to the following fees:

1. APPLICATION FILING FEE

   When an applicant files an Air Quality Impact Assessment as required by District rules, the applicant shall pay a non-refundable Application Filing Fee as follows:

   a. Residential project: $560
   b. Non-residential or mixed use project: $836

2. APPLICATION EVALUATION FEE

   Every applicant who files an Air Quality Impact Assessment as required by District rules shall pay an evaluation fee for the review of an air quality analysis and the determination of Offsite Emission Reduction Fees necessary for off-site emission reductions. The Application Evaluation fee will be calculated using the actual staff hours expended and the prevailing weighted labor rate. The Application Filing fee, which assumes eight hours of staff time for residential projects and twelve hours of staff time for non-residential and mixed use projects, shall be credited towards the actual Application Evaluation Fee.

3. OFFSITE EMISSION REDUCTION FEE

   (To be determined)

(Adopted May 20, 2009; Amended 6/16/10)

Cost Recovery and Containment Study

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

FINAL REPORT

matrix consulting group

March 9, 2011

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INTRODUCTION AND SUMMARY

In October 2010, the Matrix Consulting Group initiated the Cost Recovery and Containment Study of the Bay Area Air Quality Management District (the District). The primary goal of the study is to provide the District with guidance and opportunities for improvement regarding its organization, operation, and cost recovery / allocation practices, including the following primary objectives:

- Compare the costs of permit-related program activities to the associated revenues received from permit funding sources, and analyze how these costs are apportioned amongst fee-payers.
- Review the District's methodology for allocating costs, describing the nature of cost increases, and recommend strategies to contain costs.
- Assist the District to enhance the methodology and allocate estimated costs (direct and indirect) to various activities so that appropriate fee levels can be established.
- Identify the District's current cost containment strategies and develop opportunities for improvement regarding permitting processes and the quality of services provided to stakeholders.

Overall, the study may be used to determine whether any modifications should be made to the District's current operation and fee structures. The next section summarizes the key activities the project team conducted to complete the project, followed by a summary of key results and opportunities for improvement.

A. INTRODUCTION

This comprehensive report includes the results of various efforts undertaken by the Matrix Consulting Group to meet the District's goals and objectives, which is summarized on the following page:

Chapter	Study Area	Key Objective
1	Cost Allocation Plan	The project team identified the appropriate and reasonable allocations of actual FY 2009 / 2010 expenditures from the District's administrative programs to all District operating programs and sections. The primary objective of this Full-Cost Allocation Plan is to spread costs from administrative programs and in doing so, the District can both better understand its full cost of providing specific services to the community, and also generate organizational awareness regarding indirect (overhead) costs associated with operations.
2	Cost of Services / User Fee	The project team analyzed the cost of service relationships that exist between fees for service activities involving the following divisions: Engineering Division, Compliance & Enforcement Division, Planning, Rules & Research Division and the Technical Services Division. The results of this assessment provide a tool for understanding current service levels, the cost and demand for those services, and what fees for service can and should be charged.
3	Permitting and Enforcement	The project team conducted an assessment of the organization, operation, and management related to the permitting and enforcement processes (i.e., the fee generating activities) to identify opportunities for improvement regarding both internal management and operations, to enhance how the District works with the regulated community, as well as opportunities to improve overall customer service.

To address the areas above and complete the assessment of the District fees, costs, permitting and enforcement processes, the project team conducted a number of activities, summarized as follows:

- Held project kick-off meetings with key District managers and staff to understand and confirm the overall scope of work, project goals and objectives, and schedule.

- Conducted individual interviews with key administrative and financial personnel to understand the current fee schedules, structures and cost allocation methodologies used.

- Conducted individual interviews with District managers and staff to understand the overall roles and responsibilities of permitting and enforcement personnel and to obtain perceptions regarding current organizational and operational challenges.

- Collection and review of financial information such as time reports, expenditure reports, staffing levels, and budget documents.

- Collection and review of "as-is" and "to-be" business process maps which were developed as part of the design, development, and implementation process for the new Production System.

- Collection and review of workload information from Databank / IRIS, including raw data extraction relating to permit processing and inspections to understand overall service levels and performance.

- Conducted external stakeholder group interviews to understand their level of satisfaction regarding their interactions and collaboration with the District, including the identification of improvement opportunities.

During the course of the study, the Matrix Consulting Group collaborated with the key District managers to review and discuss deliverables.

B. SUMMARY OF KEY RESULTS AND IMPROVEMENT OPPORTUNITIES

While there are a number of specific issues and opportunities for improvement contained in this report, the following points highlight the key results of this Cost Recovery and Containment Study.

(1) The District is Recovering Approximately 62% of its Fee-Related Activity Costs, which Means the District Provides an Annual Subsidy to Fee Payers for Services.

Overall, this Cost of Services Study concluded that the District under-recovers its costs by approximately $16.8 million per year providing its *fee-related* services. Within this context, the District is over-collecting for some fee activities, while under-collecting for others. For example, the District is collecting 330% of its fees related to Stationary Containers for Organics Liquids Storage staff review activities, as well as 122% for its G-4 Miscellaneous Source, and 119% cost recovery for Greenhouse Gas fee-related activities. On the other hand, the District is collecting 7% of its costs related to Dry Cleaners, 26% of its costs related to Solid Waste Disposal Sites, 42% of its costs for

Solvent Evaporating Sources, and 43% cost recovery for fees associated with Major Facility Review (Title V). The Matrix Consulting Group recommends the following:

- **Adopt a Formal Cost Recovery Policy.** The project team recommends that the Board adopt a formalized, district-wide cost recovery policy for the fee services included in this Study. Whenever a cost recovery policy is established at less than 100% of the full cost of providing services, a known gap in funding is recognized and may then potentially be recovered through other revenue sources.

- **Adopt an Annual Fee Update / Increase Mechanism**. The project team recommends the District perform a complete update of its User Fee Study on a periodic basis. In general, 3 to 5 years for fee and rate studies is considered a best management practice. The purpose of a comprehensive update is to completely revisit the analytical structure, service level estimates and assumptions applied in the previous study, and to account for any major shifts in cost components, operations and organizational structures.

The detailed findings per fee type also provide District managers and supervisors insights relating to how they allocate staff resources, including opportunities to re-allocate staffing according to cost recovery performance. For example, with the District spending approximately $1.3 Million on review activities related to the Dry Cleaner fee-type, but collecting only $85,000, there may be opportunities to streamline / automate this process in order to reduce costs.

(2) Although the District has Implemented a Number of Cost Containment Strategies, there exists Further Opportunities to Enhance Processes and Technology to Improve Internal Operations and Customer Service.

To reduce or stabilize expenditures, the District has implemented various types of cost containment strategies, including the maintenance of a vacancy rate, reduction of service and supply budgets, increased employee contributions to retirement accounts, and others. Within this context, the project team conducted an assessment of the general organization and operations of the permitting and enforcement processes.

The assessment identified a number of strengths, as well as opportunities for improvement, summarized by the following points:

- **Continue Implementation of the new Production System.** The project team found that the current Databank / IRIS does not meet many of the best practices regarding permit management. After review of process mapping and discussions with staff, the new Production System should continue to be designed and implemented to include additional web-based features, enhanced automation capabilities for managers and staff, and additional opportunities for electronic submission of information and data (to reduce any manual and paper-based processes).

- **Enhance Permit Processing Management Practices.** The project team recommends the District implement further business practices to enhance how applications are assigned, reviewed, monitored, and managed, including the implementation of automated case management tools to improve the timeliness of application processing, increased transparency and awareness with the applicants regarding cycle time objectives, etc.

- **Continue to Provide Tools and Resources to Applicants.** The project team recommends the District continue to enhance the online / web-based capabilities regarding permit application submission, including opportunities for electronic data transfer (e.g., for emissions data), utilization of smart forms, and ability for applicants to view the status of their application online.

As such, the project team recognizes that the design, development, and implementation of the new Production System (to replace its legacy permit information management system) may significantly modernize and enhance how the District operates and provides services to its customers, thus facilitating cost containment through increased efficiency and effectiveness.

1. FULL COST ALLOCATION PLAN

The Matrix Consulting Group has prepared this Full Cost Allocation Plan (CAP) for the Bay Area Air Quality Management District (BAAQMD). This chapter presents a summary of the comprehensive analysis undertaken to identify appropriate and reasonable allocations of Actual Fiscal Year 2009-10 expenditures from the District's administrative (central service) programs to all District operating programs, and sections.

The primary objective of a Full-Cost Allocation Plan is to spread costs from administrative programs, generally called "Central Service Departments" to those programs, and/or cost centers that receive services from the administration in support of conducting their operations. In doing so, an organization can both better understand its full cost of providing specific services to the community, and also generate organizational awareness regarding indirect (overhead) costs associated with operations.

A. METHODOLOGY

This plan was compiled in accordance with Generally Accepted Accounting Principles, and is also based on many of the methods of indirect cost allocation defined by the federal Office of Management and Budget's (OMB) Circular A-87.

According to Circular A-87, costs appropriated to receivers of administrative services must be:

- Necessary and reasonable
- Reflective of benefit received
- Determined by allocation "bases" that relate to benefit received

In addition, Circular A-87 defines a method for allocating indirect costs called the double-step down allocation method, which utilizes two "steps" or "passes" to fully allocate costs. The double-step down procedure is reflected in this plan, and ensures that the benefit of services between Central Service programs are recognized first, before final allocations to receivers of services are made. For example:

- **First Step:** The Finance Department's expenses are allocated to other central service programs such as Human Resources, Information Technology, etc., as well as to Receiving Programs.
- **Second Step:** Distributes Central Service program expenses and first step allocations to the Receiving Programs only.

It should be noted that there are two types of cost allocation plans. This plan is a Full Cost Allocation plan. The second form of Cost Allocation Plan is known as an OMB A-87 Compliant Plan. An OMB-Compliant Plan is generally concerned with the use of the resulting cost allocations to develop, submit, and secure approval for State and Federal claims. For example, OMB-Compliant allocations could be used to reimburse indirect costs associated with the administration of State and/or Federal grants. An OMB-Compliant plan is far more sensitive in terms of recovering administrative costs within the framework of the specific federal requirements outlined in OMB A-87.

The following is a summary of key study processes for development of a Full Cost Allocation Plan:

- Meet with BAAQMD administrative staff to customize the structure of the plan
- Identify / classify Central Service, versus Receiving programs, and sections

- Determine the major services or "functions" provided by each Central Service program
- Allocate the staff and program costs of each Central Service program to its functions based on staff time estimates or time card records
- Discuss and determine the most reasonable and equitable basis for distribution of costs associated with each function
- Collect allocation basis data and statistics, populate the analytical model, and calculate results
- Review, revise, and finalize results with the organization
- Discuss implementation strategies
- Provide final documentation and present results

In summary, key project details for the BAAQMD cost plan are as follows: Cost figures are based on Fiscal Year 2009-10 actual expenditures, the allocation methodology is Full Cost, not Circular OMB A-87 Compliant, and the results presented in this plan were derived using a double "step-down" allocation process.

B. READING THE PLAN

The following summarizes the separate schedules of the Cost Allocation Plan, which can be used as a guide for navigation and review:

- **Summary Schedule A – Allocated Costs by Program:** Lists Central Service programs on one axis, and Receiving programs on the other. Shows how much was allocated from each Central Service program to each Receiving program. Summarized with unallocated and direct billed entries and produces a grand total for each axis. Also adds in roll forwards, if any, to give a true picture for each Receiving program.
- **Summary Schedule C – Summary of Allocated Costs:** Recaps first Central Service program expenditures, and then Receiving program allocations.
- **Summary Schedule D – Detail of Allocated Costs:** This report is very similar to Schedule A. It lists Central Service programs on one axis, and Receiving programs on the other. The data is the amount allocated from the Central Service program to the Receiving program The difference between Schedules D and A is

that A lists only the expenses allocated directly from itself to each Receiving program, and doesn't track the amounts back to where they originated from. For example, suppose the Finance Department is allocating its expenses out to other departments, including the Receiving department of the Planning Department. Some of the allocations from the Finance Department will be directly allocated to Planning, but other monies may be allocated first to another Central Service department such as Human Resources, and then from there allocated to Planning. Schedule A simplifies the processing by showing the part of the allocation to Planning from Finance. While this presents a true picture of how much of a total allocation Planning received, it does not accurately reflect how much of Planning's allocation originated in the Finance Department. Schedule D tracks allocations through from their origin. Thus the allocation that went to Planning via the Human Resources department would show in Schedule D as coming from the Finance Department. This is important in cases where reimbursement from the federal government is determined by which administrative overhead department the allocated overhead costs can come from.

- **Summary Schedule E – Summary of Allocation Bases:** Recaps the source and basis for each function of each Central Service program. For example, if the Building Maintenance function of the Facilities Management Department allocates by square footage, then the basis for the allocation of that function shown on this schedule would be square footage, and the source would potentially be blueprints of the building, or square footage records.

- **Detail Reports:** There is one set of reports for each Central Service program in the plan. The reports show an aggregate picture of the programs' expenses, a function-by-function breakdown of the expenses, each function's allocation, and an allocation summary. Each set of Detail Reports contains:

  – **Costs to be Allocated:** This is a summary of the programs' expenditures. It lists the total of the direct expenditures, a recap of the incoming expenses, and arrives at a total this program encumbers on each pass of allocations.

  – **Costs by Function:** Shows the detail of the direct expenditures, adds in incoming allocations, and breaks total costs down by function. It also demonstrates how the G&A (General and Administrative) column is reallocated, and also subtotals for each pass of allocations. Here, unallocated functions are dropped from the Plan's calculations.

  – **Function Allocations:** For each allocable function, this report shows the Receiving programs that costs are allocated to, reduces the first step down allocation amount by direct billings, and shows the amount of allocations per pass.

– **Allocation Summary:** Shows a summary list of each function's allocation, and a representative percentage of how much is allocated to each Receiving program.

It is important to note that summary Schedules A and E are the optimal documents for beginning review of the Cost Allocation Plan and are included as Appendices in this report. Schedule A provides a summary of results and "bottom-line" picture of the analysis. The reviewer may then refer to the Detail Reports if more information on how allocations shown on Summary Schedule A were derived. Schedule E provides a summary of the allocation methodology applied to each central service program. Schedules C and D were provided to the District under separate cover.

C. NARRATIVES FOR EACH CENTRAL SERVICE PROGRAM

For each Central Service program in this Plan, the following provides a summary of each Program, a description of the program's major functions, and a description of how costs associated with each function were allocated.

(1) Executive Office

Under the leadership and direction of the Executive Officer / APCO and the Board of Directors, the Executive Office guides the Bay Area Air Quality Management District in meeting its mission of protecting and improving public health, air quality, and the global climate through regulation, incentives, and education. The Executive Office consists of four programs: Executive Office, Board of Directs, Hearing Board, and Advisory Council. For purposes of this study, the Hearing Board was not allocated. Costs associated with each program are allocated to Receiving Programs, as follows:

- **104 Executive Office –** represents costs associated with the administration and direction of district programs. These costs have been allocated based upon the number of staff per Program / Section.

- **121 Board of Directors –** represents costs associated with the overall administration of activities of the Board of Directors. These costs have been allocated based upon the number of staff per Program / Section.

- **123 Advisory Council –** represents costs associated with advising and consulting with the Board of Directors and Executive Office, as well as making recommendations and reports on matters that affect both policy and the legislative agenda. These costs have been allocated based upon the number of staff per Program / Section.

(2) Legal Services Division

The District Counsel provides legal advice, counseling and representation to the Board of Directors and its Committees, the Executive Officer / APCO, District staff, and the Advisory Council in the execution of their respective statutory mandates and responsibilities. The District Counsel also represents, or manages outside counsel, representing the District in all litigation involving the District and in matters before the District's Hearing Board. The Legal Services Division consists of four programs: Legal Counsel, Hearing Board Proceedings, Penalties Enforcement & Settlement, and Litigation. Costs associated with each program are allocated to Receiving Programs, as follows:

- **201 Legal Counsel –** represents costs associated with advising, counseling, and assisting the Board of Directors, the Executive Officer / APCO, and District staff on all legal matters relate4d to the District's clean air mission and operations. These costs have been broken down into three functions, and allocated as follows:

  - **Permitted Sources –** costs are allocated based upon the permitted source revenue per program for FY 2010.

  - **Direct Support –** costs are allocated based upon the percentage of direct time spent in support of Programs / Sections.

- **202 Hearing Board Proceedings –** represents costs associated with representing the District in all proceedings involving variances, orders of abatement, permit appeals and permit revocations before the District's Hearing Board. These costs have been allocated directly to Permit Renewals.

- **203 Penalties Enforcement & Settlement –** represents costs associated with removing the economic benefit from, and providing a credible and effective deterrence to, violations of District Rules by reaching settlements or pursuing penalty enforcement actions fairly and consistently. These costs have been broken down into three functions, and allocated as follows:

  - **District Wide Support –** costs are allocated based upon the number of staff per Program / Section.

  - **Permitted Sources –** costs are allocated based upon the permitted source revenue per program for FY 2010.

  - **Direct Support –** costs are allocated based upon the percentage of direct time spent in support of Permit Renewals and Title V.

- **205 Litigation –** represents costs associated with representing and overseeing the District representation in State and Federal courts. These costs have been broken down into three functions, and allocated as follows:

  - **District Wide Support –** costs are allocated based upon the number of staff per Program / Section.

  - **Permitted Sources –** costs are allocated based upon the permitted source revenue per program for FY 2010.

  - **Direct Support –** costs are allocated based upon the percentage of direct time spent in support of Permit Renewals and Title V.

(3) Communications & Outreach Office

The Communications Office develops and delivers public information messages through the media and public events to support the District's priority programs. The Communications Office strives to increase public awareness, encourage behavior change and understanding of the roles that the public, business community and District play in reducing air pollution. The Communications and Outreach Office consists of two sections: Public Information and Community Outreach. Costs associated with each program are allocated to Receiving Programs, as follows:

- **301 Public Information –** represents costs associated with acting as the District's main point of contact with the public and media, and developing effective clean air partnerships with non-profit organizations. These costs have been broken down into three functions, and allocated as follows:

  - **District Wide Support –** costs are allocated based upon the number of staff per Program / Section.

  - **Permitted Sources –** costs are allocated based upon the permitted source revenue per program for FY 2010.

  - **Direct Support –** costs are allocated based upon the percentage of direct time spent in support of Programs / Sections.

- **302 Community Outreach –** represents costs associated with facilitating the implementation of the District's community outreach objectives. These costs have been broken down into three functions, and allocated as follows:

  - **District Wide Support –** costs are allocated based upon the number of staff per Program / Section.

  - **Permitted Sources –** costs are allocated based upon the permitted source revenue per program for FY 2010.

  - **Direct Support –** costs are allocated based upon the percentage of direct time spent in support of Programs / Sections.

(4) Administrative Services Division - Human Resources

The Human Resources Office is responsible for personnel matters including payroll and benefits, labor and employee relations, recruitment and testing, processing personnel actions, employee performance appraisal and recognition programs, organizational development and training, health and safety compliance, workers compensation and special events coordination. The Human Resources Office consists of five programs: Payroll, Benefit Administration, Organizational Development, Employment Relations, and Recruitment & Testing. Costs associated with each program are allocated to Receiving Programs, as follows:

- **106 Payroll –** represents costs associated with administering payroll for District employees and processing benefit payments. These costs have been allocated based upon the number of staff per Program / Section.

- **107 Benefit Administration –** represents costs associated with administering benefits programs for District employees. These costs have been allocated based upon the number of staff per Program / Section.

- **109 Organizational Development –** represents costs associated with providing appropriate workplace learning and organization development to increase organizational effectiveness and results through training and development activities. These costs have been allocated based upon the number of classes provided per Program / Section.

- **111 Employment Relations –** represents costs associated with providing management and staff support in the area of employment relations. These costs have been allocated based upon the number of staff per Program / Section.

- **114 Recruitment & Testing –** represents costs associated with conducting recruitment and testing for external and internal candidates to fill vacant positions. These costs have been allocated based upon the number of recruitments per Program / Section.

(5) Administrative Services Division – Finance Office

The Finance Office oversees Accounts Payable, Accounts Receivable, Budgeting, the annual audit of the financial statements, as well as other core functions, and ensures that proper accounting, internal controls and accurate and timely reporting requirements are met. The Finance Office consists of the Accounting Program, and costs associated with this program are allocated to Receiving Programs, as follows:

- **701 Accounting –** represents costs associated with maintaining the fiscal stewardship and financial accountability of the District. These costs have been allocated based upon the number of staff per Program / Section.

(6) Administrative Services Division – Strategic Facilities Planning Office

The Strategic Facilities Planning Office is responsible for the day to day operations of Air District facilities, security, safety, and maintenance. The Strategic

Facilities Planning Office consists of the Strategic Facilities Program, and costs associated with this program are allocated to Receiving Programs, as follows:

- **702 Strategic Facilities –** represents costs associated with the planning, security, safety, and maintenance of existing equipment. These costs have been allocated based upon the occupied square footage per Program / Section.

(7) Administrative Services Division – Business Office

The Business Office is responsible for contracts, purchasing, non-workers compensation risk management and office support services. The Business Office consists of two programs: Communications and Purchasing. Costs associated with these programs are allocated to Receiving Programs, as follows:

- **703 Communications –** represents costs associated with maintenance of the day-to-day communication and reproduction operations of the District. These costs have been allocated based upon the number of staff per Program / Section.

- **708 Purchasing –** represents costs associated with providing for the purchasing of equipment and supplies, and negotiating lease and service contracts. These costs have been allocated based upon the number of purchase orders per program / section.

(8) Administrative Services Division – Vehicle Maintenance

The Vehicle Maintenance section includes the maintenance of the District's 152 vehicle fleet, and the operation of the garage facilities. Costs associated with the Vehicle Maintenance Section are allocated to Receiving Programs, as follows:

- **710 Vehicle Maintenance –** represents costs associated with fleet maintenance and garage facilities. These costs have been allocated based upon the number of vehicles per Program / Section.

(9) Administrative Services Division – Technical Library

The Technical Library provides materials and information on air quality and related subjects to staff and the public as its primary function. The Librarian selects, orders, and processes books, reports, periodicals, and electronic media, and keeps staff

informed of library acquisitions. Costs associated with the Technical Library are allocated to Receiving Programs, as follows:

- **801 Technical Library –** represents costs associated with providing current and archival information and reference assistance on matters relating to air quality and environment to staff, other environmental agencies, libraries, students and the general public. These costs have been allocated based upon the number of staff per Program / Section.

(10) Information Services Division

The Information Services Division is comprised of three programs that provide various types of operational support and services to all District staff, and directly to members of the regulated community that use District on-line technologies. These programs are: Information Management Records and Content, Information Systems Software Development, and Information Technology Engineering & Operations. Costs associated with the Technical Library are allocated to Receiving Programs, as follows:

- **712 Information Management Records & Content –** represents costs associated with providing archival and retrieval services for the District's records produced by various Divisions in both their physical and digital versions, as well as supporting and maintaining the District's web presence through its multiple sites. These costs have been allocated based upon the percentage of labor identified using fee schedules per Program / Section.

- **725 Information Systems Software Development –** represents costs associated with providing design, development, implementation and support of business systems that embody the District business process. These costs have been allocated based upon the percentage of labor identified using fee schedules per Program / Section.

- **726 Information Technology Engineering & Operations –** represents costs associated with providing computer and telecommunications infrastructure as well as providing service and support for all staff. These costs have been allocated based upon the number of staff per Program / Section.

2. USER FEES AND COSTS OF SERVICES

This chapter presents the results of the Cost of Services (User Fee) Study conducted by the Matrix Consulting Group for the Bay Area Air Quality Management District (BAAQMD). Division 26 of the Health and Safety Code created the California Clean Air Act. Under this regulation, the BAAQMD is responsible for protecting public heath and the environment by achieving and maintaining state and national ambient air quality standards and reducing the risk of public exposure to toxic air contaminants in the region, which represents nine counties within the District. The Matrix Consulting Group analyzed the cost of service relationships that exist between fees for service activities involving the following divisions: Engineering Division, Compliance & Enforcement Division, Planning Rules & Research Division and the Technical Services Division. The results of this Study provide a tool for understanding current service levels, the cost and demand for those services, and what fees for service can and should be charged.

The methodology employed by the Matrix Consulting Group is a widely known and accepted “bottom up” approach to cost analysis, where time spent per fee type is determined for each program budgeted within a division. Once time spent for a fee activity is determined, all applicable costs are then considered in the calculation of the “full” cost of providing each service. The following table provides an overview of the types of costs applied in establishing the “full” cost of services provided by each Division included in this Study:

Cost Component	Description
Direct	Fiscal Year 2009/10 actual salaries, benefits and allowable expenditures.
Division Overhead	Division administration / management and clerical support
District-wide Overhead	District costs associated with central service costs such as payroll, human resources, budgeting, District management, etc. These costs are established through the Full Cost Allocation Plan performed by the Matrix Consulting Group (provided under separate cover).
Supporting (Cross) Division Review	Where applicable, direct and indirect costs associated with division support

Together, the cost components in the table above comprise the calculation of the total "full" cost of providing any particular service, whether a fee for that service is charged or not.

The work accomplished by the Matrix Consulting Group in the analysis of the proposed fees for service involved the following steps:

- **Division Staff Interviews:** The project team interviewed staff in each division regarding their needs for clarification to the structure of existing fee items, as well as their time reported activities.

- **Data Collection:** Data was collected for each item, including, time reports, expenditure reports and staffing levels for the FY 2009/10 fiscal year and were entered into the Matrix Consulting Group's analytical software model.

- **Cost Analysis:** The full cost of providing each service included in the analysis was established. Cross-checks such as revenue reports and allocation of not more than 100% of staff resources to both fee and non-fee related activities assured the validity of the data used in the Study.

- **Review and Approval of Results with District Staff:** District Management have reviewed and approved these documented results.

A more detailed description of user fee methodology, as well as legal and policy considerations are provided in subsequent sections of this chapter.

A. SUMMARY OF RESULTS AND RECOMMENDATIONS

Overall, this Cost of Services Study concluded that the District under-recovers its costs by approximately $16.8 million per year providing *fee-related* services. While the detailed documentation of the Study will show an over-collection in certain fees types, and an undercharge for others, overall, the District is providing an annual subsidy to fee payers for all services included in the analysis.

The display of the cost recovery figures shown in this report are meant to provide a basis for policy development discussions among District Management and the Board of Directors, and do not represent a recommendation for where or how the Board should take action. The setting of the "rate" or "price" for services, whether at 100 percent full cost recovery or lower, is a decision to be made only by the Board, often with input from District staff and the community. The Matrix Consulting Group strongly recommends that the District use the information contained in this report to discuss, adopt, and implement a formal Cost Recovery Policy for the District, and also to implement a mechanism for the annual update of fees for service.

(1) Adopt a Formal Cost Recovery Policy

The Matrix Consulting Group strongly recommends that the Board adopt a formalized, district-wide cost recovery policy for the fee services included in this Study. Whenever a cost recovery policy is established at less than 100% of the full cost of providing services, a known gap in funding is recognized and may then potentially be recovered through other revenue sources. The following table presents typical cost recovery percentages seen in other jurisdictions, predominantly municipal and county jurisdictions:

Department	Typical Cost Recovery %
Administration	Varies
Building and Safety/Code Enforcement	80 - 100%
Planning (Administrative Costs Only)	40 - 80%
Public Works/Engineering	Land Development – 80-100%, Encroachment Permits 40 - 80%
Fire	Building Plan Review – 80-100%, Uniform Fire Code Permits - 20 – 60% Annual Fire Safety Inspections 0 - 100%

Information presented in the table above is based on the Matrix Consulting Group's experience in analyzing local government's operations across the United States, and reflects the *typical results* of cost recovery analysis, not typical policy decisions made by local adopting authorities. In fact, very few jurisdictions have adopted formal cost recovery policies at the division / service level. The Matrix Consulting Group considers a formalized cost recovery policy for various fees for service an industry Best Management Practice.

(2) Adopt an Annual Fee Update / Increase Mechanism

The Matrix Consulting Group recommends the District perform a complete update of its User Fee Study on a periodic basis. In general, 3 to 5 years for fee and rate studies is considered a best management practice. The purpose of a comprehensive update is to completely revisit the analytical structure, service level estimates and assumptions applied in the previous study, and to account for any major shifts in cost components, operations and organizational structures.

In between comprehensive updates, the District could utilize published industry economic factors such as CPI or other regional factors to update the cost calculations established in the Study on an annual basis. Alternatively, the District could also

consider the use of its own anticipated labor cost increases such as step increases, benefit enhancements, or cost of living raises. The latter example provides a more realistic reflection than a CPI, given the fact that labor costs generally comprise the majority of cost calculations for a jurisdiction. Use of an automatic increase mechanism based on the District's own labor costs also provides a factor that is specific to it and its operations, rather than one that is specific to a region or industry as a whole. Utilizing an annual increase mechanism would ensure that the District receives appropriate fee and revenue increases that reflect growth in costs.

B. LEGAL FRAMEWORK AND POLICY CONSIDERATIONS

A "user fee" is a charge for services provided by a governmental agency to a public citizen, entity or group. In California, several constitutional laws such as Propositions 13, 4 and 218, State Government Codes 66014 and 66016, and more recently the Attorney General's Opinion 92-506 set the parameters under which the user fees typically administered by local government are established and administered. Specifically, California State Law, Government Code 66014(a), stipulates that user fees charged by local agencies, "…may not exceed the estimated reasonable cost of providing the service for which the fee is charged", and under Prop 218, thus does not constitute a special tax, which requires voter approval. In addition and specific to an air district, Division 26 of the Health and Safety Code, section 42311 identifies what costs for pollution control programs related to permitted stationary sources may be included in the fees that an air district may charge. This regulation authorizes the District to recover costs of the full range of programs and activities related to air quality assessment and planning, control measure development, rulemaking and implementation, compliance

assistance and enforcement, as well as permitting and the various administrative tasks necessary to support these activities. The District fee authority is intended to provide air districts the means to carry out air quality programs related to permitted stationary sources without tax-payer funding.

(1) General Principles and Philosophies Regarding User Fees

Air quality districts, as well as local governments are providers of many types of regulatory services to their communities. While all services provided are beneficial to constituents, some services can be classified as globally beneficial to all citizens, while others provide more of a direct benefit to a specific group, business or individual in the course of business operations. The following table provides examples of services provided by air quality districts and local government within a continuum of the degree of community benefit received:

Services that Provide General "Global" Community Benefit	Services that Provide Both "Global" Benefit and also a Specific Group or Individual Benefit	Services that Provide a Primary Benefit to an Individual or Group, with less "Global" Community Benefit
• Achieving & Maintaining Clean Air • Public Safety (Police)	• Clean Air and a safe working environment • Fire Suppression / Prevention	• Operating Permit for stationary sources (issued by BAAQMD) • Planning and Zoning Review • Building Permit

Funding for air quality districts, as well as local government is obtained from a myriad of revenue sources such as taxes, fines, grants, special charges, user fees, etc. In the table above, services in the "global benefit" section tend to be funded primarily through voter approved tax revenues. In the middle of the table, one typically finds a mixture of taxes, user fee, and other funding sources. Finally, in the "individual / business / group benefit" section of the table, lie the services provided by the district and local government that are typically funded almost entirely by user fee revenue.

The following are two central concepts regarding the establishment of user fees:

- **Fees should be assessed according to the degree of individual or private benefit gained from services**. For example, the processing and approval of a permit to operate or building permit will generally result in monetary gain to the applicant. Whereas, a program, such as the Intermittent Control Program, which includes public education and other efforts to entice the public to take public transportation and rideshare as an effort to reduce emissions benefits the community as a whole, and

- **A profit making objective should not be included in the assessment of user fees.** In fact, California laws require that the charges for service be in direct proportion to the costs associated with providing those services. Once a charge for service is assessed at a level higher than the actual cost of providing a service, the term "user fee" no longer applies. The charge then becomes a tax subject to voter approval, per Prop 218.

Therefore, it is commonly accepted that user fees are established at a level that will recover up to, and not more than, the cost of providing a particular service.

(2) General Policy Considerations Regarding User Fees

Undoubtedly, there are programs, circumstances, and services that justify a subsidy from a tax based or alternative revenue source. However, it is essential that jurisdictions prioritize the use of revenue sources for the provision of services based on the continuum of benefit received and funding ability.

Within the services that are typically funded by user fees, the Matrix Consulting Group recognizes several reasons why District staff or the Board may not advocate the full cost recovery of services. The following factors are key policy considerations in setting fees at less than 100 percent of cost recovery:

- **Limitations posed by an external agency.** The State or other agency will occasionally set a maximum, minimum, or limit the jurisdiction's ability to charge a fee at all. Examples include Transportation Permits commonly issued by Public Works departments or charging for time spent copying and retrieving public documents, such as in the Communications and Outreach Division.

- **Encouragement of desired behaviors.** Keeping fees for certain services below full cost recovery may provide better compliance from the community. For example, if the cost to register a piece of equipment is higher than the cost of the equipment itself, many applicants will avoid equipment registration with the District.

- **Encourage participation for individuals or groups.** Policy makers may decide to fully subsidize or set fees at a level that will enhance participation of the community, such as Spare the Air Days, whereby the cost of public transportation is free in order to encourage participation.

- **Benefit received by user of the service and the community at large is mutual.** Many services that directly benefit a group or individual equally benefit the community as a whole, for examples, the Vehicle Buy-Back and Spare the Air.

The Matrix Consulting Group recognizes the need for policy that intentionally subsidizes certain activities. The primary goals of a User Fee Study are to provide a fair and equitable basis for determining the costs of providing services, and assure that the District is in compliance with State law.

Once the full cost of providing services is known, the next step is to determine the “rate” or “price” for services at a level which is up to, and not more than the full cost amount. The Board is responsible for this decision, which often becomes a question of balancing service levels and funding sources. The placement of a service or activity within the continuum of benefit received may require extensive discussion and at times fall into a “grey area”. However, with the resulting cost of services information from a User Fee Study, the Board can be assured that the adopted fee for service is reasonable, fair, and legal.

C. USER FEE STUDY METHODOLOGY

The Matrix Consulting Group utilizes a cost allocation methodology, commonly known and accepted as the “bottom-up” approach to establishing User Fees. The term

means that several cost components are calculated for each fee or service. These components then build upon each other to comprise the total cost for providing the service. The components of a full cost calculation are typically as follows:

Cost Component	Description
Direct	Salaries, benefits and allowable departmental expenditures.
Division Overhead	Division administration / management and clerical support.
District-wide Overhead	District costs associated with central service costs such as payroll, human resources, budgeting, District management, etc. Established for this Study through a separate Cost Allocation Plan analysis performed by the Matrix Consulting Group.
Cross-Division Support	Costs associated with review or assistance in providing specific services. For example, costs performed by the Technical Services Division are included as an applicable cost toward the fees for service that are initiated in the Engineering Division.
Planning, Research, Policy, and Systems Update and Maintenance	Examples often include: regulations updates and enforcement, and technology costs.

The general steps utilized by the project team to determine allocations of cost components to a particular fee or service are:

- Develop time allocation for each service included in the study;
- Calculate the direct cost attributed to each time allocation;
- Utilize the program specific allocation of staff time to establish an allocation basis for cost components;
- Distribute the appropriate amount of the other cost components to each fee or service based on the staff time allocation basis, or other reasonable basis.

The result of these allocations provides detailed documentation for the reasonable estimate of the actual cost of providing each service. The following are critical points about the use of time reporting and the validity of cost allocation models.

(1) Staff Time Reports are a Measure of Service Levels Required to Perform a Particular Service

One of the key study assumptions utilized in the "bottom up" approach is the use of time reports for the provision of each fee related service. Utilization of time reports is a reasonable and defensible approach, especially since these records were developed as an after the fact accounting of time. The project team worked closely with District staff in reviewing and validating the time reports for accuracy.

The Matrix Consulting Group agrees that while the use of time reports by program for each fee category is not as accurate, as tracking time by each permit or fee for service, it is the best alternative available for setting a standard level of service for which to base a jurisdiction's fees for service, and it meets the requirements of California law.

The alternative to allocating time by program for each permit type is actual time tracking, often referred to billing on a "time and materials" basis for each permit. Except for in the case of anomalous or sometimes very large and complex projects, the Matrix Consulting Group believes this approach not to be cost effective or reasonable for the following reasons:

- Accuracy in time tracking is compromised by the additional administrative burden required to track, bill, and collect for services in this manner;
- Additional costs are associated with administrative staff's billing, refunding, and monitoring deposit accounts;
- Customers often prefer to know the fees for services in advance of applying for permits or participating in programs;
- Applicants may begin to request assignment of faster or less expensive personnel to their project;
- The District can better predict revenue streams and staff needs using

standardized time reporting and allocation of costs by program to fee types and anticipated permit volumes.

Situations arise where the size and complexity of a given project warrants time tracking and billing on a "time and materials" basis. However, the Matrix Consulting Group discourages this practice whenever possible.

(2) Cross Checks Ensure the Validity of our Analytical Model

In addition to the collection of time reporting data by program for each fee or service type included in the User Fee Study, staff data for the total number of hours are also a critical component. By collecting data on the total hours available by program for each fee or service, a number of analyses are performed which not only provide useful information regarding allocation of staff resources, but also provide valuable cross checks that ensure the validity of each cost allocation model. This includes assurance that 100% of staff resources are accounted for and allocated to a fee for service, or "other non fee" related category. Since there are no objectives to make a profit in establishing user fees, it is very important to ensure that services are not estimated at a level that exceeds actual resource capacity. If at least and not significantly more than 100% of staff resources are accounted for, then no more than 100% of costs associated with providing services will be allocated to individual services in the Study.

D. RESULTS

The motivation behind a cost of services (User Fee) analysis is for the Board of Directors and District Staff to maintain services at a level that is both accepted and effective for the community served, and also to maintain control over the policy and management of these services. Discussion of results in this section is intended as a summary of extensive and voluminous cost allocation documentation produced during

the Study. The full analytical results were provided to District staff under separate cover from this summary report. In addition, the appendix to this report also includes more detailed cost calculation results:

- **On an annualized basis:** the project team utilized total activity costs to project annual subsidies and revenue impacts associated with the implementation of fee for service at full cost recovery levels.

It should be noted that the results presented in this report are not a precise measurement. In general, the a cost of service analysis takes a "snapshot in time", where the most current fiscal year of actual expenditures cost information is compared to the most current actual fiscal year of revenue and workload data available. Workload data may then be adjusted to reflect "reasonable and defensible" estimates for purposes of analysis.

For contextual purposes, it is important to note that fee revenue (~$27 Million) equates to approximately 25% of grand total revenue, transfers, grant program distributions and projects funding for the District – while County revenue (~$20 Million) equates to approximately 20% of grand total District funding. The table on the following page presents a summary of results by Fee Type for the District.

Fee Name	Revenue at Current Fee - Annual ($)	Total Cost - Annual ($)	Surplus / (Deficit) - Annual ($)	Current Cost Recovery Percentage
A - HEARING BOARD	4,192	213,992	(209,799)	2%
B - COMBUSTION OF FUEL	7,059,240	8,485,182	(1,425,942)	83%
C - STATIONARY CONTAINERS FOR ORGANIC LIQUIDS STORAGE	2,282,518	691,094	1,591,424	330%
D - GASOLINE TRANSFER - DISPENSING FACILITIES, PLANTS & TERMINALS	3,202,560	7,448,119	(4,245,559)	43%
E - SOLVENT EVAPORATING SOURCES	1,882,721	4,489,739	(2,607,018)	42%
F - MISCELLANEOUS SOURCES	1,408,313	1,833,989	(425,676)	77%
G-1	1,516,868	2,602,102	(1,085,234)	58%
G-2	399,468	1,249,964	(850,496)	32%
G-3	374,199	894,545	(520,346)	42%
G-4	2,025,581	1,663,200	362,381	122%
G-5	489,940	682,754	(192,814)	72%
H - SEMICONDUCTOR AND RELATED OPERATIONS	98,257	280,489	(182,232)	35%
I - Dry Cleaners	85,504	1,295,065	(1,209,561)	7%
K - SOLID WASTE DISPOSAL SITES	184,793	723,962	(539,169)	26%
L - ASBESTOS OPERATIONS	1,674,660	2,687,613	(1,012,953)	62%
N - TOXIC INVENTORY (AB 2588)	628,865	764,234	(135,369)	82%
P - MAJOR FACILITY REVIEW (Title V)	2,774,573	6,457,780	(3,683,207)	43%
R - EQUIPMENT REGISTRATION	34,129	231,266	(197,137)	15%
S - NATURALLY OCCURRING ASBESTOS OPERATIONS	12,492	460,984	(448,492)	3%
T - GREENHOUSE GAS	1,222,929	1,030,822	192,107	119%
Total	**27,361,802**	**44,186,894**	**(16,825,092)**	**62%**

FY 2009/10 Actual Expenditures, FY 2009/10 Revenue

E. CONCLUSION

The Bay Area Air Quality District engaged the Matrix Consulting Group to determine the total cost of services provided to its citizens and businesses for all District fee activities. To calculate the total cost of the District's fee services, Matrix Consulting Group employed both a widely accepted and defensible methodology, as well as the experience and input of District staff to complete the necessary data collection and discussion to complete the analysis. District leaders can now use this information to make informed decisions and set its fees to meet the fiscal and policy goal objectives of the District.

Overall, this Cost of Services Study concluded that the District under-recovers its costs by approximately $16.8 million per year providing its *fee-related* services. While the detailed documentation of the Study will show an over-collection in some areas or certain fees, and an undercharge for others, overall, the District is providing an annual subsidy to fee payers for all services included in the analysis.

The project team recommends the District try to recover as much of the fee service costs as is feasible. For most fee related services, the Matrix Consulting Group recommends setting fees at as close to 100% cost recovery as possible. However, as discussed in previous sections of this chapter, several policy factors often warrant adoption of fee levels at less than 100%.

3. PERMITTING AND ENFORCEMENT PROCESSES

In order to assess the permitting and enforcement processes and identify opportunities for improvement, the project team developed a set of performance measures, which are called “best management practices,” against which to assess the District. These performance measures have been derived from the project team's collective experience and represent the following ways to identify departmental strengths as well as improvement opportunities:

- Statements of "effective practices" based on the study team's experience in evaluating operations in other local governments or “industry standards” from other research organizations.
- Identification of whether and how the District meets the performance targets.
- Identification of the opportunity for improvement.

While the focus of this study was to identify issues, it is important to note the Bay Area Air Quality Management District has a number of organizational and operational strengths (identified in this assessment), as well has implemented a number of strategies in order to contain its costs over the past several years, including such strategies as the following:

- The filling only of critical positions / vacancies
- Maintenance of a 10% vacancy rate by leaving open positions through attrition
- Reduction of service and supply budgets by 10% during FY 2010 / 2011, and a target of 15% for FY 2011 / 2012
- Increased employee contribution to retirement accounts
- Reduction of the unfunded liability associated with other costs for retiree health care obligations.

Additionally, the District is currently engaged in a major initiative with the design, development, and implementation of the new Production System (to replace its legacy permit information management system) that will significantly modernize and enhance how the District operates and provides services to its customers. The following sub-sections provide the results of this assessment and identify numerous opportunities which may lead to more efficient and effective operations, as well as a higher quality of customer service.

(1) Permit Information System

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
1. The permit information system is web-based – the system provides internal users access to data and functions via a web-browser.		The current information management system, Data Bank / IRIS, is not web-based. The District, however, should be designing and implementing a new permit information management system (i.e., the "Production System") that is web-based, allowing access from any computer terminal.
2. The permit information system provides online permit applicant access for tracking applications/permits via the Internet.	The District publishes a monthly report on its website on what major permits were issued.	Current District permit applicants do not have the access to online information regarding the status of their respective permit application. The new Production System should be designed and / or implemented with online capabilities.
3. The permit information system lists the status of pending permit applications for internal management purposes.	The District staff runs regular internal reports from Data Bank / IRIS to view permit application status, including when the permit application was received, completed, whether it has been assigned, etc.	The new Production System should be designed and / or implemented to readily provide web-based capabilities to see the status of permit applications.

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
4. The permit information system includes an integrated wireless product; users can access the system via a wireless interface. Users (e.g., inspectors) can enter data into a PDA or laptop while in the field and upload data to the automated permit information system wirelessly or through hot/active sync.		Data Bank / IRIS does not have wireless capabilities. With the implementation of the Production System, the District should utilize wireless interfaces and capabilities, especially for the field inspectors, in order to view permit history, update comments, etc.
5. The permit information system uses a standard non-propriety database (e.g., Microsoft SQL Server) as its primary relational database management system (RDBMS).	IRIS utilizes SQL.	The current Data Bank / IRIS system is utilizing a dated mainframe for data (HP 3000 / 9000) and custom in-house code for data management. The new Production System should utilize a relational database management system (such as Oracle).
6. The permit information system has a centralized client server topology model, with software deployment files in a MSI format (e.g., Microsoft Windows Installer installation package file) to provide better corporate deployment and a standard format for component management.		The new Production System should utilize a centralized client server to standardize operations and management (e.g., system updates).
7. The permit information system is fully integrated with other enterprise systems used by the agency (such as the financial accounting system).	There is some level of integration between the permit system, the inspection system, and the enterprise-wide financial system (JD Edwards) through nightly data transfers for invoicing and updating of files and accounts.	Data Bank / IRIS are not fully integrated with other District information management systems (i.e., the financial system and the inspector / enforcement system). The new Production System should be designed and / or integrated with the disparate systems to promote consistency and efficiency among the operating units (i.e., permitting, invoicing, and inspections).

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
8. The permit information system has robust GIS integration – the system allows for display of all data via a GIS data browser. The system has bi-directional capabilities that will allow the user to manage data on the GIS which in turn updates the permitting system without duplicate data entry	The District utilizes electronic mapping for certain functions and activities, such as geo-coding new facilities in order to coordinate and assign facilities, while the Toxics Section utilizes GIS mapping for modeling.	The Production System should be designed and / or implemented to support GIS capabilities.
9. The permit information system contains the ability to QA/QC data input into the application. This includes the capacity to minimize staff inputting inaccurate information into various activity fields, through such tools as data input "masks", or templates that force the user to adhere to a prescribed character format or pull-down list.	The District utilizes smart forms for the internal combustion engines, but most of the forms have limited or no automated QA / QC capabilities.	The new Production System should be designed and / or implemented with automated features that minimize manual data input errors (i.e., utilizing, smart forms, automated fee calculations, standard permit conditions, etc.).
10. The permit information system has the ability to stamp which user has either created or modified an activity record.	Data Bank / IRIS provides the ability for staff to log the date and time of permit application receipt, and there are hierarchal security and access levels in place (e.g., only certain positions have access and update rights).	Data Bank / IRIS has a limited audit trail for each permit application showing the date, time, and specific staff member who handled the permit application folder. Data Bank / IRIS also has a limited audit trail for modification of data in the system (e.g., time, date, personnel stamp, etc.). The new Production System should be designed and / or implemented with audit trail capabilities, which specifically track the user and types of changes made to a record (including date and time), including capturing the identification of all staff who was assigned to that permit application during its lifetime (i.e., the current system does not track when permit is re-assigned).

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
11. The permit information system contains scheduling capabilities. This capability is based upon a tie-in from the system to the existing email / calendar vendor (i.e., Microsoft's Outlook).		The new Production System should be designed and / or implemented to integrate with email and calendar systems, which, for example, can facilitate such features as automatic emails to supervisors regarding overdue permit applications.
12. The permit information system has the ability to automatically notify staff and the permit applicant of any status change to their permit applications or renewals.		Data Bank / IRIS has limited capabilities to notify of status changes. The new Production System should be designed and / or implemented with these automated auditing features.
13. The permit information system enables applicants to submit their permit applications and renewals online.	For registration of certain types of equipment, the District allows for electronic and online submittal and fee payment capabilities from its website.	Data Bank / IRIS does not support online submission of permit applications. The new Production System should be designed and / or implemented with electronic submittal capabilities for both permit applications and renewals.
14. The permit information system provides applicants with the relevant electronic permit application and renewal forms online.	For registration of certain types of equipment, the District allows for online renewal capabilities. Additionally, permit application forms are available on the website which can be printed out and completed (but not submitted electronically).	Data Bank / IRIS are not a web-based system which supports automated submissions, and does not support the electronic receipt of data from the facilities (e.g., such as emissions information during the renewal process). Currently, permit holders must contact the District to retain copies of update questionnaires or permit invoices. The new Production System should be designed and / or implemented to allow online submission for high volume source categories, such as for auto-body shops, dry cleaners, etc.
15. The permit information system links to on-line access to electronic versions of applicable and current agency permit regulations from within the automated permit information system.	The District website provides electronic PDF copies of various policies, procedures, forms, applications, etc.	

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
16. The permit information system has the capability through table-driven fee schedules to perform mathematical computations for varied fee calculations, eliminating the need to manually calculate permit fees outside of the permit software.	The District permit renewal fees/invoices are generated automatically.	Data Bank / IRIS does not automatically generate fees for permit applications (as the fee calculations are currently done manually). The new Production System should be designed and / or implemented for automated fee calculations based on emissions and other factors (requiring the system to be table driven).
17. The permit information system contains functionality to process electronic payments.	The District allows for registrations, and corresponding renewals, of certain types of equipment to be paid online.	The Production System should be designed and / or implemented to allow for online payments, especially for “smaller” applicants that meet certain criteria, who should be allowed to automatically pay for permits at time of online submittal (thus limiting processing time and manual involvement by District staff).
18. The permit information system supports the capability to debit charges against fee deposits and later display the payment components.		The Production System should be integrated with JD Edwards and the invoicing process to automatically adjust invoice amounts.
19. The permit information system supports the issuance of receipts for permit application payments.	For the renewal process, the Permit to Operate is generated showing respective fee amount.	Data Bank / IRIS does not have receipt issuance capabilities. The new Production System should be designed and / or implemented (with JD Edwards integration) to support receipt issuance.
20. The permit information system supports the on-line storage of permit application comments, corrections, and annotations.	Data Bank / IRIS have a comments field (e.g., for status updates).	Data Bank / IRIS does not support web-based storage of information on each permit application file, such as scanned documents or images, etc. The new Production System should be designed and / or implemented to electronically store information related to the application (including engineer comments, etc.).

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
21. The permit information system supports the automatic integration of common / standard permit conditions based on permit application / source type.	In hard copy form, the District does have a series of standard permit conditions / templates for common sources. Data Bank / IRIS users can query on this information to find it, but its not automatically shown or populated based on the permit application type.	The new Production System should be designed and / or implemented to store approved template permit conditions for reference by engineers, inspectors, and other pertinent staff. The system should automatically assign the permit conditions based on source type.
22. The permit information system enables users to attach digital (i.e., MS Word or scanned hard copy) documents and images/pictures to any activity or permit, or to add a "pointer tag" to a document/image to tell the system where the document is located. These files are stored in a centralized network location.	Permit applications stored on NEKO and Peelle systems are accessible to staff from their computer terminals.	The District should have a consolidated and centralized document archive. The new Production System should be designed and / or implemented to upload and store necessary scanned and other electronic documents for permit applications.
23. The permit information system operates according to business tasks and rules defined by the agency to automatically assign permit applications (based on such criteria as type, staff workload, etc.)	If the facility is already assigned to an engineer, the current system will automatically assign a new permit application based on the facility number.	Data Bank / IRIS does not make automatic assignment of permit applications (this is manually checked and will be assigned based on whether it is a new facility). The new Production System should provide automated assignment and routing of permit applications (based on both qualitative and quantitative factors) in order to promote better time management and workload balancing among staff. Additionally, the new Production System should be configurable to allow managers to set cycle time objectives (i.e., number of days from permit application submittal) that are different from the regulatory dates.

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
24. The permit information system automatically populates applicant fields if the applicant data already exists in the system.	Data Bank currently populates facility contact information (contact name, facility address, and contact address) for AC / PO letters, annual update requests, and billing invoices.	Data Bank / IRIS does not store and / or automatically populate applicant information. The new Production System should be designed and / or implemented to utilize more "auto-populating" capabilities.
25. The permit information system enables the management of the agency to perform permit application routing, tracking and monitoring from start to finish, including the date received, the date assigned to a staff member for review, the date the 1st, 2nd, etc. review was completed by such staff, the date the comments and corrections were sent to the permit applicant, the date that the permit application was returned to the agency for 2nd, 3rd, etc. review by the permit applicant, etc.	Data Bank / IRIS capture various data elements, including Application Number, Site Number, Received Date, Project Title, Employee Identification Number, Date of Completion, Type, Result, and Result Date.	Data Bank / IRIS does not support management processes to fully understand the activity, date, and assigned staff through the lifecycle of the permitting process. The new Production System should be designed and / or implemented to track and manage all tasks and activities throughout the lifecycle of the permitting process, and should generally have an adequate number of descriptors to promote case management and ability of managers to identify the exact status of a permit application.
26. The permit information system is utilized to accept permit applications upon receipt, assign application numbers, route permit applications to other divisions for review, maintain corrections, maintain conditions of approval, issue permits, etc.	The District utilizes a "To" process which forwards / assigns (per the system) the permit application.	Data Bank / IRIS does not automatically generate application numbers or assign permits based on permit application type. The new Production System should be designed and / or implemented for automated routing and tracking features.
27. The permit information system enables all of the agency divisions involved in the permit process to enter/edit and retrieve data.		Data Bank / IRIS allow only a limited number of users to have access to the same permit application, and does not support District-wide access to the permit application simultaneously. The new Production System should be designed and / or implemented to allow for enterprise wide access.

PERMIT INFORMATION SYSTEM		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
28. The permit information system generates usable project management reports so that managers and supervisors can monitor levels of service and staff performance.	Data Bank / IRIS provide for some key information that allow managers and supervisors to obtain and print out (e.g., to identify which permit applications have not yet been assigned, to monitor staff performance, etc.).	The new Production System should be designed and / or implemented with more comprehensive and integrated "dashboards" to support the proactive management of permit applications and processes, including staff caseload balance and activity levels.
29. The permit information system enables staff to input information from all pertinent divisions and sections.		The new Production System should be designed and / or implemented to allow for all divisions; for example, Technical Services, to input source test results, and Toxics to enter risk screening results and data.
30. The permit information system assigns a unique number to each piece of equipment/source to track historical data.	Data Bank / IRIS does track a unique number for each piece of facility equipment.	The new Production System should be designed and / or implemented to identify each piece of equipment/source and its respective historical and emissions data.

(2) Permit Fee and Cost Recovery

PERMIT FEE AND COST RECOVERY		
Best Management Practice	**Strengths**	**Opportunities for Improvement**
31. A formal cost recovery policy has been developed and adopted by the agency.	The District regularly prepares a Cost Recovery Report that compares the costs with the revenue and indicates the shortfall or subsidy.	The target for cost recovery is approved annually by the Board of Directors based on year-to-year staff proposals; however, a more formalized cost recovery policy or directive (e.g., 75% of total relevant costs) should be memorialized to effectuate the budget planning process, as well as to assist with resource planning and deployment.
32. The fees associated with permits are evaluated annually and adjusted as necessary to maintain compliance with the adopted cost recovery policy.	Permit fees are adjusted annually based on results of the cost recovery report.	The District should implement a formal policy that clearly defines the level of subsidy that the District is trying to achieve.
33. The agency has conducted a formal permit fee study within the last 5 years to ensure individual fees charged are (1) appropriate and in proportion to the staff time required for review and processing; and (2) at a level sufficient to cover full cost of services provided (or level of cost recovery adopted by policy).	Formal fee studies were conducted in 1999, 2005, and, currently, for 2010.	The District is limited by the Health and Safety Code Section 41512.7 that limits the amount that the fees can be increased in any one year by 15%; therefore, if the District sets a recovery policy at 75% recovery, it could increase fees incrementally until the policy level has been reached. As such, the District should develop policies and procedures that define what the appropriate and sufficient levels are for staff time and cost recovery.
34. The cost allocation and fee methodologies are made public to promote transparency with financial-related information.	The District publishes cost and fee information on its website.	

(3) Permit Processing Management

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
35. The agency has developed Specific, Measureable, Achievable, Time-bound and Realistic (SMART) performance metrics for the processing of permits.	The District reports out on a number of metrics, which are primarily workload based vs. performance based. Some key outcome measures tracked and published by the District include compliance rates for source tests (i.e., refineries, Title V facilities, gasoline tanks, gasoline-dispensing facilities, etc.).	The District should establish outcome and performance-based metrics regarding permit processing and timeliness, and publish to the public, as well as for internal performance management to monitor staff workload and activity. Some permit metrics include: • Total number of days to develop a permit (from receipt of the permit application to permit issuance). • Number of days the permit clocked is stopped (when the District is waiting for re-submittals on an incomplete application). • Percentage of permit applications received that are incomplete. • Number of iterations of information requests.
36. The agency utilizes information system to manage the length of calendar time required for permit application review.		The District does not utilize a automated permit information system to proactively manage caseload assignment, review, and the monitoring of case status, including: • Cycle time objectives set for the length of time for completion of permit applications. • Collection of actual processing time using the automated permitting system to enable comparisons to these targets.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
37. The agency uses a "case manager" in the permit operation for the processing of permit applications. The case manager is the single point of contact for the permit applicant and responsible for the coordination of the processing of the permit by all of the agency's Divisions. The case manager is responsible for the processing of the permit from "cradle to grave."	The District utilizes an assigned staff (typically an engineer or technician) for the major facilities, who serves as the liaison for that facility throughout the permitting and review process.	
38. The permit applicant is informed of the name of their case manager within five workdays of submittal of their permit application.	The District sends a notification letter to the applicant when an application is assigned.	The District should formalize a "five-day" policy and track it within the permit information management system to ensure permit applicants are being informed in a timely manner.
39. The permit applicant is informed of the cycle time objectives for action on an application when the application is submitted.	The District permit timelines are identified in Regulation 1, Rule 1, which is available on the web-site.	At time of submittal, each permit applicant should be informed (via writing or email, etc.) of the expected permit review timelines.
40. The case manager contacts the permit applicant at the beginning of the processing of the permit to expedite further communication during the permit development process.	The engineers will contact the applicant regarding application fees or other information needed.	The District should formalize the policy of contacting the permit applicant (for proactive communication beyond calling for missing information), and updating the permit case management system to reflect this activity was completed.
41. A monthly report is generated for the General Manager reporting actual vs. planned performance against these cycle time objectives.		The District should track performance statistics more regularly (e.g., bi-weekly) by unit managers / supervisors to track activity and performance. The District should publish these performance reports to the website.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
42. Permit checklists have been developed for the various types of permit application submittals to enable the agency staff to focus their attention on the relevant aspects of permit application review and assure uniformity among staff.	The District publishes a Permit Handbook which documents the key elements for evaluating many types of device categories.	The institution of templates would streamline permit processing. There are templates for smaller facilities, such as gas stations; however, most other facilities / sources do not have templates. The District should work to re-evaluate and develop templates for all possible high volume source categories.
43. Permit applications are checked at the counter upon submittal for initial completeness and rejected if missing basic application item based upon rigorous criteria/checklist for accepting and rejecting applications.	The District has developed a "Completeness Determination Checklist;" however, it is not utilized for acceptance / rejection during initial permit application submittal.	Currently, all permit applications are accepted, assigned, and routed – and are deemed complete (or incomplete) by the assigned engineer. Additionally, Data Bank / IRIS defaults the application to "complete" after a certain number of working days (which could happen either if the Engineer reviews and determines it is complete, or if the Engineer does not do anything at all). Essentially, the District should implement a policy that all engineers must physically update the case if deemed complete or not. Based on permit data, up to 60% of applications are incomplete, requiring additional time for processing and staff review. The District should establish a policy and process to review applications at time of submittal, and reject if incomplete. As such, the new Production System should be designed / implemented to reject permit applications that are not submitted with minimum requirements. Additionally, the data forms and wizards should be implemented so that pertinent data is received in the initial submittal.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
44. If modeling is required for a complete permit application, a copy of the permit application is given to the agency's modeling section as soon as the permit application is received so that the modeler and permit engineer are working under similar cycle timelines.		The new Production System should be designed / implemented to identify those applications which may require risk screening analyses, and route as necessary to the modeler for simultaneous review. The electronic permit application should allow multiple staff the ability to review an application at the same time.
45. Each case manager has desktop PC access to GIS and to the automated permit information system.	Staff has access to Data Bank / IRIS, as well as to the new Production System for permit information.	
46. Permit staff have written procedures or procedures manual for permit application acceptance, processing, report writing, conditions, etc.	The District has developed the Permit Handbook, providing general permitting guidelines, including determination of completeness and descriptions of permit requirements for sources of air pollution.	The Permit Handbook (dated 2006) should be comprehensively updated (to also reflect the new and best practice business processes supported by the Production System). Additionally, the District should develop comprehensive "how to" procedures for key business processes (renewals, emissions data usage, etc.) in order to better standardize processes among staff.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
47. The agency uses a pre-permit application process to provide guidance to the applicant for all large applications, (i.e., Title V permit applications).	The District provides opportunities for pre-application meetings.	The District should formalize the process of each engineer having pre-permit application meetings for large applications, and should include discussions regarding: • Appropriate air quality permit application materials for the proposed construction or operating permit. • Appropriate emissions control measures. • Possible permit conditions of approval. • Answering questions staff may have regarding the source's emission calculations. • Anticipated timeline for permit application processing.
48. The permit applicant is required to submit electronic versions of their emissions calculations spreadsheet (if available) at the same time the permit application is submitted, to enable permit engineer review of the calculations.		The District should expand opportunities that allow electronic submission of data from facilities.
49. A standing inter-division joint review committee is utilized to review permit applications and determine conditions of approval.		The District should implement regular meetings among the divisions to review template conditions and rule applicability. This will improve consistency and standardization among staff when dealing with the permit applicants.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
50. Permit applicants, or their representatives, are invited to meet with the case manager and other necessary staff to discuss their application if it will be deemed incomplete at the deadline established in the corresponding regulation. The case manager informs the applicant face-to-face about basic problems, if any, with the application, preliminary findings, basic conditions that might be imposed, and timing for processing of the application.	The District utilizes “incomplete” letters to the applicant, and meets with the permit applicant at the respective applicant’s request.	
51. The agency has developed standard conditions of approval for the issuance of permits.		The District does not have readily available a checklist of standards to determine whether a source can receive a permit. The District should integrate standard and template conditions into the Production System.
52. The standard conditions of approval utilized by all of the divisions in the review of permit applications are documented in an on-line library of conditions integrated into the automated permit information system.		The District should integrate the conditions of approval within the Production System based on business rules and application types in order to expedite the review process.
53. The permit holder should be informed of the applicable rules and regulations of their permitted device(s).		The new Production System should be designed / implemented to inform the permit holder of the applicable rules and regulations.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
54. The agency has developed written policies on prioritization of permits; i.e., first-in, first-out, how to manage backlogs, and when and how to use consultants to supplement agency staff.	The District assigns permit applications to staff based on availability, expertise, and workload.	The District should develop policies and procedures regarding the prioritization and "triaging" of permit applications.
55. The permit operation has developed a formal written routing matrix that identifies what types of air permit applications will be routed to what divisions under what circumstances.		To support the consistent routing of permit applications, the District should develop a routing matrix which identifies the divisions or units that will be required to review the permit application.
56. The District has streamlined the number of sections that are routed air permit applications. The number of hand-offs have been minimized by reducing the number of staff that are routed the permit for evaluation, typing, data entry, etc.	The District has implemented a tracking system for applications that are reviewed by different divisions.	The District currently utilizes various functional units during permit application processing, including resources from the Toxics Evaluation Section, Permit Evaluation Section, Permit Systems Section, and Engineering Projects Sections. With the implementation of the new Production System, the District will achieve greater efficiencies during the review process (e.g., less data entry, less manual review and routing, etc.).
57. The agency uses a standard template to describe the specific information that is missing in the initial permit application submittal that prevents the permit application from being deemed complete.	The District has published a "Completeness Determination Checklist," which outlines the required items in order for the permit application to be deemed complete.	

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
58. The agency has facility permitting process for permitting the entire facility. The agency issues a single permit for an entire facility, generally with conditions and emissions limitations for specific pieces of equipment.	The District utilizes a single federal operating permit for each major facility.	
59. Staff is organized by industry type that they serve. Permit applications for complex facilities are handled within the industry group, therefore reducing problems with multiple contacts.	District permitting staff has specialized groups for some industry types. A technical contact list is posted on the District web-site for the public to contact the Engineering Division for specific topics and source categories.	
60. The agency issues a decision to approve or deny a permit for an authority to construct specifications within 7 calendar days, medium sources within 30 calendar days, and large sources within 60 calendar days of the permit application being deemed complete	The target for the District is 35 calendar days for most application types from the date of complete application determination, and 60 days for larger applications that trigger public comment.	The new Production System should be designed / implemented that allows online application submission and receipt of the respective permit for the smaller, routine applications.
61. The agency has implemented a training and certification program for the private sector personnel, in order to establish a pool of professionals who can certify businesses as being in compliance with agency rules and regulations. If these certified professionals conduct permit evaluations for some sources, staff only needs to check the work, rather than perform the evaluation. Inspections by certified professionals would need to be periodically checked.		The District should explore a program to utilize certified private sector personnel to certify businesses, especially in relation to the more complex projects.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
62. The agency has established a program to certify private environmental professionals to prepare permit applications. The agency provides expedited review of permit applications prepared by certified professionals. The agency also conducts an audit program to determine whether requirements for the preparation of applications have been followed, and will perform decertification of certified professionals under specified conditions.		The District should explore a program of certified environmental professionals to prepare permit applications for businesses, and in turn the review process may be expedited by receiving complete applications initially.
63. The agency has established formal BACT guidelines that provide standard procedures for conducting determinations. Source categories have been predefined, and procedures of evaluation and cost effectiveness calculations are presented in a district guideline document. The procedures not only require consideration of controls deemed to be achieved in practice, but also the consideration of alternative basic equipment and alternative fuels. In addition, consideration must also be given to identify potentially feasible controls that are more stringent than controls currently achieved in practice.	The District has published comprehensive BACT / TBACT guidelines which are available on the website related to combustion sources, petroleum industry, organic liquid storage tanks, coating sources, solvent cleaning sources, electronic / semiconductor industry, waste processing industry, soil / water remediation sources, toxic sources, etc.	

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
64. The agency has streamlined toxics screening by developing a method to screen projects that do not pose unacceptable risks and do not need a comprehensive health risk assessment.	The District has defined various emissions triggers that result in the need for toxics screening.	
65. If applicable, the California Environmental Quality Act (CEQA) review for permit applications is conducted / coordinated by the case manager within the permit operation, the same case manager responsible for the engineering analysis of the permit application.	The assigned engineer is responsible for conducting / facilitating the CEQA review for permit applications.	
66. The agency has identified permit-related decisions for certain types of facilities to be ministerial, and therefore exempt from CEQA. This includes projects that: 1) have no significant environmental impacts for all environmental media; 2) comply with local, State, and federal air quality rules, regulations, and laws; and 3) are not unique so permit operation and other agency staff can evaluate them through the agency's manual of procedures.	The District has defined criteria for CEQA exemption.	The District should evaluate and expand additional permit types that could be deemed ministerial, and should continue to focus resources on activities that are adding value.
67. The agency requires a CEQA applicability checklist form as part of the permit application package. Every applicant is required to complete and submit this form regardless of equipment type.	The District utilizes a CEQA checklist.	

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
68. CEQA air quality guidelines are current and include thresholds of significance.	The District's CEQA Guidelines include recommended air quality significant thresholds.	
69. The agency provides an online fee calculator to determine and calculate the permit applicants' permit fees.		The District should provide an online tool for permit applicants to determine the applicable fees. This will improve the standardization and consistency of fee calculations and reduce errors. The new Production System should be designed / implemented to calculate preliminary fees at time of submittal.
70. The agency has consolidated permit processing for Title V and non-Title V permits.	The District has consolidated some of the staff and review process for both Title V and non-Title V permits.	All permits are regardless of their complexity have the same level of review. The District should evaluate the appropriate level of review for all permit types. For large permits (e.g. Title V), review assignments should be established so that staff can focus on specific parts of the permit.
71. The agency's permit staff evaluate applications for BACT, offset, toxics, source test and public notification issues immediately to get the applicant working on long lead time problems up front rather than thirty days or more into the process.		The new Production System should be designed / implemented with various features (or capabilities) to identify the applicable triggers for review (based on the application type or source category).
72. The agency has established consolidated facility permits. These permits replace the previous practice of issuing an individual permit for each "emissions unit."	The District utilizes a single permit for the facilities that have multiple pieces of stationary sources.	The new Production System should be designed and / or implemented to include all Authorities to Construct, Permits to Operate and registered equipment in a single document.

PERMIT PROCESSING MANAGEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
73. The accounts receivable functions are appropriately organized.	Fees for a permit application are calculated by the assigned permit engineer. Annual update/permit renewal fees are generated automatically by Data Bank.	Permit engineers are currently required to collect permit application and renewal fees that have not been submitted on time. Permit engineers should be responsible for determining the amount of fees due for a permit application, however, fee collection should be the responsibility of accounts receivable staff.

(4) Minor Permit Processing

MINOR PERMIT PROCESSING		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
74. The agency has triaged its permitting system and process so that it focuses more regulatory permitting and compliance / enforcement staff hours on those facilities with higher tons of emissions per year.		There is limited performance management data to track the staff time allocated to various types / sizes of facilities (i.e., by amount of emissions). The District should implement protocols to allow for time-tracking of workload by staff related to major initiatives (e.g., permit processing, application review, etc.), as well as to the relative amount of emissions.

MINOR PERMIT PROCESSING		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
75. The agency has developed "permit exemptions" that allows low emitting sources to be exempt from the air permit process if they meet defined criteria / performance standards. The exemption allows the facilities to operate and construct as long as compliance with the defined criteria / performance standards is achieved. The exempt facilities are subject to compliance / enforcement inspection to assure compliance with the defined criteria / performance standards.	The District has developed various policies for equipment exemption (e.g., Powder and Radiation Cured Coating Operations, etc.).	The district should review and update the permit exemptions in regulation 2, rule 1. Over the years the permit exemption levels do not reflect the guiding principles. Smaller emitting sources have had to obtain permits.
76. The agency has identified source categories that are exempt from agency permitting requirements based upon low emissions, and the CAPCOA NSR Task Force recommendations, and published this list of source categories on their web site.	The District allows for applicants to register certain types of equipment (which meet specific criteria) and operate without a Permit to Operate. The types of equipment exempt from the permit process includes agricultural diesel engines, portable equipment, char broilers, etc.	The district should review and update rules, regulations and policies regarding exempt, registered and permitted devices.
77. The agency does not require air modeling for issuance of minor source permits.	The District does not require air modeling for issuance of minor source permits.	
78. The agency has a pre-certification program that is used when the equipment meets all permitting requirements.	The District has the Accelerated Permit Program	

MINOR PERMIT PROCESSING		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
79. The agency has established an Equipment Certification program that allows equipment manufacturers to have their equipment certified voluntarily by the district to assure compliance with agency rules and regulations.	Per District Regulation 2-1-415, the District allows for the opportunity for permit applicants to pre-certify sources.	
80. Once the Equipment Certification evaluation is completed and if the results are satisfactory, the agency transfers the equipment information to the permit information system and a "certified equipment permit" is issued for that make and model of equipment.		The District should integrate the list of per-certified and / or exempt types of equipment with the permit information management system.
81. The agency offers expedited permitting for commonly used equipment.	The District provides for a limited exemption Accelerated Permitting Program under its Regulation 2-1-106.	
82. The agency has consolidated the authority to construct and operate into a single permit process of certain small sources.	The District allows for online registration of certain types of equipment.	
83. The agency participates in the State-wide registration of portable equipment. Businesses are able to register portable internal combustion engines with the California Air Resources Board and operate them in any California air district without having to obtain local permits.	The District participates in the state-wide program.	

MINOR PERMIT PROCESSING		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
84. The agency does not require annual renewal of permits for low emission industries. The permits must, instead, be renewed every five years. The agency still performs annual inspections and, if necessary, modifies the permit, and fees are still charged annually.	The District requires permits to be renewed annually, with back-up generator permits on a 2-year cycle (if no other equipment types are at that facility). For low emissions facilities and equipment, the District should utilize 5-year permit renewal cycles to limit staff time.	For low emissions facilities and equipment, the District should implement multi-year permits for additional categories. This process should be phased-in to allow for any adjustments as necessary.

(5) Tools and Resources Available to Applicants

TOOLS AND RESOURCES AVAILABLE TO APPLICANTS		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
85. The agency's website includes information on how to apply for an air permit, and include targeted information for specific industry sectors.	The District has an extensive amount of information on its website, including general information on organization and operations, as well as tools to assist applicants on the permitting process (e.g., forms, rules and regulations, permit handbook and guidelines, etc.).	The District should review and update all documentation periodically.
86. The agency has developed permit application guides for specific source categories which document all forms and information that must be submitted with a permit application and posts this information online.	The District has published its Permit Handbook online, and includes such items as checklists for application completion.	The District should review and update all documentation periodically.
87. The agency has developed template spreadsheets for emissions calculations and made the templates available online.	The District has emission calculation spreadsheets built into the Permit Handbook for many sources categories.	

TOOLS AND RESOURCES AVAILABLE TO APPLICANTS		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
88. The agency publishes the names of staff members online, including phone numbers and email addresses.	The District has the names, contact information, section within the organization, for all its employees available online.	
89. The agency has clearly identified online the most common types of permit processing issues.	The District posts Frequently Asked Questions to guide applicants through the process and minimize the possibility of errors or emissions.	
90. The agency has provided a clear description online of the most common reasons for it to deem permits incomplete after submittal.		The District should post examples on its website of reasons why applicants are deemed incomplete.
91. The agency has developed computer-based tutorials regarding how to complete permit applications.		The District should implement computer-based tutorials for how to complete applications.
92. The agency actively performs outreach to the regulated community on the air permitting process through targeted newsletters or electronic bulletins.	District operating divisions perform outreach to the regulated community, as well as to the public on a regular basis.	
93. The agency actively performs outreach to the regulated community for any air quality rule changes.	The District publishes memos and other communications regarding changes in rules and regulations.	
94. The agency has established a small business assistance program for small business stationary sources.	The District has established various small business programs and initiatives, including for compliance assistance.	

(6) Air Quality Rules and Regulations

AIR QUALITY RULES AND REGULATIONS		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
95. Up-to-date air quality rules and regulations are available that are easy for staff to interpret and understand that includes an index to make sections of the ordinance easy to locate.	The District has published its Rules and Regulations on its website, showing both the adopted and amended dates.	The Rules and Regulations should be comprehensively integrated and indexed to allow for easier navigation (i.e., PDF).
96. The air quality rules and regulations regulate from the "general" to the "specific".	The regulations begin with the provisions and definitions that related to all District regulations, followed by regulations governing authorities to construct and permits to operate, then by how fees are established.	
97. Regulations applying to all regulated industries are in one place in the air quality rules and regulations.	Regulation 1: General Provisions and Definitions are included within one section, which apply to all District regulations.	
98. Administrative provisions in the air quality rules and regulations are grouped in one section.	Regulation 1: General Provisions and Definitions are included within one section, which apply to all District regulations. Additionally, the respective sections have a “General” introduction and “Definitions” section.	
99. Terms, definitions and measurements are clearly articulated and grouped/illustrated in one location.		All of the terms, definitions, and measurements are not located and illustrated in one section, but throughout the rules and regulations as appropriate. The District should standardize definitions among the different rules (e.g. VOC is different among the different Regulation 8 rules).

AIR QUALITY RULES AND REGULATIONS

Best Management Practice	Strengths	Opportunities For Improvement
100. The air quality regulations are prescriptive (specifying what is expected), rather than proscriptive (specifying what is prohibited), as much as possible.	Although there is language which specifies applicant expectations, there is also language which identifies what the applicant "cannot" do.	
101. Tables and lists are effectively used (are preferred over text), and appear on the same or a following page as the accompanying text.		The District should place the rules and regulations are in tabular (or matrix) format for ease of organization or navigation.
102. The air quality regulations provide purpose statements for each section as needed.	After clicking on the PDF section of the regulation / rule, there is a "General" and "Definition" section.	
103. The air quality regulations chapter and section titles are descriptive.	The District provides a general explanation of each regulation / rule as on-line text.	
104. The air quality regulations provide references in a consistent manner (e.g., italics) to: • Any defined word in the air quality regulations; • Other related provisions in the air quality regulations; • Relevant adopted policies or interpretations outside the air quality regulations; and • Provides references to dates of revisions within each chapter or section, as appropriate.		The Rules and Regulations language does not include any specialized or unique font when making references to particular sections. Additionally, the District should utilize hyperlinks to any reference documents or rules.
105. All of the air quality regulations sections, titles and paragraphs are numbered or lettered.	Each regulation and rule includes a bold number reference and bold title.	

AIR QUALITY RULES AND REGULATIONS		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
106. The format of the air quality regulations permits the addition of new Articles within Sections in a logical manner.		The District should revisit the numbering sequence to eliminate any gaps, and to facilitate the ease of adding regulations or amending existing regulations.
107. There is a clearly identified method to memorialize and subsequently codify air quality Interpretations.		The rules and regulations should include a section which has codified the interpretations made and approved by the Board, that is easy to understand and identify.
108. Air quality interpretations are fully integrated into the air quality regulations not less than once a year.		Based on amended dates, many of the rules and regulations have not been updated for many years. The District should implement the policy to integrate interpretations of the air quality regulations every 12 months.

(7) Compliance and Enforcement

COMPLIANCE AND ENFORCEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
109. The permit information system enables users to enter the results of compliance and enforcement inspections including the name of the inspector, the data of inspection, the results of the inspection, inspection notes, etc.		Data Bank / IRIS are not fully integrated with the inspections information management system. The new Production System should be designed and / or implemented for full integration with the inspector management system (which also provides inspectors insights regarding permit history, conditions of approval, etc.).

COMPLIANCE AND ENFORCEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
110. The new information system will include an integrated wireless product; users can access the system via a wireless interface. Users can enter data into a PDA/Tablet or laptop while in the field and upload data to the automated enforcement information system wirelessly.		The new Production System should be designed and / or implemented with online capabilities for field inspectors. This will decrease the amount of manual data entry and enhance efficiency.
111. The information system has robust GIS integration – the system allows for display of all data via a GIS data browser. The system will have bi-directional capabilities that will allow the user to manage data on the GIS which in turn updates the enforcement system without duplicate data entry. GPS enabled PDA/Tablet will provide automated data entry and locations of permitted equipment.		The Production System should be designed and /or implemented to support automated GPS capabilities. Highly accurate facility and/or equipment locations will allow improved health risk modeling. Current notebook computers with wireless cards do not have GPS capability.
112. The information system contains the ability to QA/QC of data input for the permit application. This includes the capacity to minimize staff inputting inaccurate information into various activity fields, through such tools as data input “masks”, or templates that force the user to adhere to a prescribed character format or pull-down list. Field collection of throughput data based on results of compliance inspections.		The new Production System should be designed and / or implemented with automated features that minimize data input errors (i.e., utilizing smart forms,).

COMPLIANCE AND ENFORCEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
113. Incentive programs help industry reduce emissions. Field staff conducting grant required inspections prior to funding approval provides efficiencies versus office staff traveling to field locations for inspections.	The Air District implements a variety of incentive programs that help fleet operators offset the cost of purchasing low-emission vehicles, re-powering old polluting heavy duty diesel engines with cleaner, lower-emission engines, and installing emission control devices that reduce particulates and NOx. These incentives are available for a wide variety of on-road and off-road equipment. In addition, one program focuses specifically on school buses. The District also operates a vehicle buy-back program to provide financial incentives to remove the oldest, most polluting light-duty vehicles from our roadways.	
114. Compliance assistance programs include a full range of educational and technical assistance programs which provide a basis for self-inspection programs and help companies ensure compliance.	The District's compliance assistance activities include a full range of educational and technical assistance programs such as a Compliance Hotline, Courtesy Facility Reviews, a Speakers Bureau, Industry Compliance Schools, and the publication of Policy and Procedure Guidelines which provide a basis for self-inspection programs. The Division works with individual companies, industry groups, trade associations, small business assistance programs, and green business programs to promote self-compliance with air regulations.	

COMPLIANCE AND ENFORCEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
115. The agency routinely conducts inspections and audits to ensure compliance with applicable federal, state and agency regulations.	The Inspection Program routinely conducts inspections and audits to ensure compliance with applicable federal, state and District regulations. Source categories include refineries, chemical plants, semiconductor manufacturing facilities, dry cleaners, ink and coating operations, gasoline dispensing facilities, as well as asbestos demolition and renovation. The District also regulates any other activities which result in the emission of an air contaminant which interfere with attainment and maintenance of health-based air quality standards, or which may cause a public nuisance.	
116. Interagency coordination allows for multi-media inspection and actions to best utilize facility and agency resources.	The District participates in interagency environmental task force programs to coordinate District compliance activities with other County/State governmental agencies.	
117. Major air pollution/accidental releases are high priority for response.	The Air District responds to major air pollution incidents on a high priority within minutes of notification, provide technical assistance and support to first response agencies during and after incidents. Incident reports are posted on the web for public/media agencies information within 24 hours.	The District should make an independent assessment of the emissions impact of the event.

COMPLIANCE AND ENFORCEMENT		
Best Management Practice	**Strengths**	**Opportunities For Improvement**
118. Air pollution complaints from the public are received 24/7 and investigated promptly.	The District receives over 6,000 air pollution complaints every year from members of the public. Members of the public are keenly aware of air pollution events in their communities and often act as the first observers of air quality problems to the Air District. Satisfactory resolution of complaints is one of the most important and challenging objectives of Air District staff. Air pollution complaints are received 24/7 and investigated promptly.	
119. Refinery inspection programs have specially-trained group of refinery inspectors that conduct compliance inspections, investigate air pollution violations check air pollution monitoring equipment and respond to air pollution incidents.	Refinery inspection programs have designated refinery inspectors.	
120. Public exposure to toxic asbestos fibers is minimized by regulating asbestos demolition and renovations companies and construction/grading of naturally occurring asbestos.	The District's asbestos regulation addresses companies performing demolition/renovations in single family houses and construction grading using Best Available Control Technology for toxic air contaminants. The District has a dedicated inspection staff to administer and enforce the rule.	

APPENDIX A: SUMMARY OF EXTERNAL STAKEHOLDER COMMENTS

SUMMARY OF EXTERNAL STAKEHOLDER COMMENTS

As part of the Cost Recovery and Containment Study, the Matrix Consulting Group conducted focus groups / interviews with external stakeholders on December 13, 2010 and December 14, 2010, including members from the California Council for Environmental and Economic Balance and the Western States Petroleum Association. The purpose of the meetings was to obtain insights regarding the quality of interactions with the Bay Area Air Quality Management District, relating to personnel, operations and processes, and technology.

The following table highlights the key themes and paraphrased comments regarding strengths, challenges, and / or opportunities for improvement regarding their respective interactions and experiences.

Category	Key Issues	Key Opportunities for Improvement
People Feedback regarding overall quality of interaction with District personnel	• Personnel sometimes go "overboard" with their analyses, and spend a lot of time on issues which may have little emissions impact. • There is a lack of consistency among engineers, and they each have different approaches and interpretations on standards and permit conditions. • There is a lack of consistency among inspectors. • Personnel have gone away from judgment, and seem go above and beyond the stated regulations.	• Personnel should be more consistent with analytical approaches, interpretations, etc. • Personnel should not be spending a lot of time on small issues. • The inspectors need to have a better understanding of the scope of what they need to be collecting (they seem to be asking for much more information than necessary

Category	Key Issues	Key Opportunities for Improvement
Process Feedback regarding overall operations and business processes	• The timeliness for smaller permit applications is good, however, for the larger ones there are "mixed results" • It does not appear that communication / integration occurs between Inspections and Engineering, the "internal departments don't talk" • It is not clear how the District calculates emissions – there is a lack of connection between data being sent in and the invoice being received. • The District seems to have the same level of scrutiny whether they are large emitters or small emitters. • It appears that we have to permit every project twice (new sources review permit and Title V permit), so we have 2 permit applications and 2 permit fees we are paying. • Old information and files seem to get lost, and will have to re-submit the same information. • There seems to be a tendency to place a lot of permit conditions that are duplicative of regulations.	• The District should obtain external stakeholder input and feedback during the rule making and development process. • They need to enhance their internal efficiencies, including improving their ability to triage and streamlining workflow. • There needs to be more internal consistency and more standardization. • The data and reports needed by the District should be consolidated, as we currently send in different types of data in various different days. • The District needs to minimize the amount of hard-copies handled. • There should not be additional monitoring or extra reporting requirements that are not providing value.
Technology Feedback regarding information technology tools and resources	• It is difficult to find information on the website • There does not seem to be a lot of automation with the current system.	• The District should communicate to the external stakeholders of any changes of information on its website (e.g., for documents, etc.). • The District needs the capacity and ability to receive electronic data transfers and reports from the facilities. • A big advantage would be the ability to file permit applications online so it is not processed or tracked manually. • There should be a way of modeling emissions that does not follow the standard approach.

APPENDIX B: SCHEDULE A AND E

Bay Area Air Quality Management District

Allocated Costs by Department

Central Service Departments	122 Hearing Board	303 Intermittent Control Programs	305 Spare the Air (CMAQ)	401 Enforcement	402 Compliance Assistance & Operations	403 Compliance Assurance	501 Permit Evaluation	502 Permit Renewals
104 Executive Office	$2,883	$8,218	$7,425	$209,554	$150,299	$314,584	$201,337	$25,591
121 Board of Directors	$367	$1,039	$940	$26,505	$19,011	$39,790	$25,466	$3,237
123 Advisory Council	$93	$272	$246	$6,932	$4,972	$10,407	$6,660	$846
201 Legal counsel								$1,099,981
202 Hearing Board Proceedings								$410,996
203 Penalties Enforcement & Settlement	$343	$968	$874	$24,663	$17,689	$37,024	$23,696	$767,447
205 Litigation	$384	$1,105	$998	$28,182	$20,213	$42,307	$27,077	$126,265
301 Public Information	$1,037	$28,697	$2,683	$75,717	$54,307	$113,666	$72,747	$16,648
302 Community Outreach	$881	$24,355	$2,266	$63,972	$45,883	$96,034	$61,463	$14,097
106 Payroll	$355	$1,010	$914	$25,776	$18,488	$38,696	$24,766	$3,148
107 Benefit Administration	$2,287	$6,526	$5,896	$166,400	$119,348	$249,800	$159,874	$20,321
109 Organizational Development					$160,017			
111 Employment Relations	$760	$2,169	$1,960	$55,311	$39,671	$83,033	$53,142	$6,754
114 Recruitment & Testing				$15,045	$75,228			
701 Accounting	$2,602	$7,399	$6,685	$188,674	$135,324	$283,240	$181,276	$23,041
702 Strategic Facilities	$4,980	$13,865	$6,656	$80,855	$52,506	$105,650	$163,261	$28,943
703 Communications	$860	$2,450	$2,213	$62,471	$44,807	$93,782	$60,022	$7,629
708 Purchasing	$4,294	$4,865	$7,727	$35,485	$30,048	$16,312	$3,147	
710 Vehicle Maintenance				$238,868	$150,398	$309,644		
801 Technical Library	$113	$317	$287	$8,094	$5,805	$12,150	$7,777	$988
712 Information Management Records & Content	$13,242			$74,158	$74,158	$77,690	$87,400	$88,283
725 Information Systems Software Development	$59,138			$331,173	$331,173	$346,943	$390,311	$394,253
726 Information Technology Engineering & Operations	$3,751	$10,703	$9,671	$272,925	$195,750	$409,716	$262,222	$33,329
Subtotal	$98,370	$113,958	$57,441	$1,990,760	$1,745,095	$2,680,468	$1,811,644	$3,071,797
Proposed Costs	$98,370	$113,958	$57,441	$1,990,760	$1,745,095	$2,680,468	$1,811,644	$3,071,797

Bay Area Air Quality Management District

Allocated Costs by Department

Central Service Departments	503 Air Toxics	504 Permit Operations	506 Title V	507 Engineering Special Projects	601 Source Inventories	602 Air Quality Plans	603 Air Quality Modeling Support	604 Air Quality Modeling & Research
104 Executive Office	$66,968	$66,607	$48,009	$60,480	$37,053	$32,872	$20,112	$39,647
121 Board of Directors	$8,470	$8,425	$6,073	$7,650	$4,686	$4,157	$2,544	$5,015
123 Advisory Council	$2,215	$2,204	$1,588	$2,000	$1,226	$1,087	$665	$1,312
201 Legal counsel	$37,800	$267,210	$234,647					
202 Hearing Board Proceedings								
203 Penalties Enforcement & Settlement	$12,723	$40,527	$229,977	$7,118	$4,360	$3,869	$2,367	$4,666
205 Litigation	$9,948	$15,316	$15,529	$8,134	$4,983	$4,421	$2,705	$5,332
301 Public Information	$24,560	$25,813	$19,009	$21,853	$13,388	$12,086	$7,267	$14,326
302 Community Outreach	$20,751	$21,817	$16,068	$18,463	$11,311	$10,212	$6,140	$12,103
106 Payroll	$8,238	$8,193	$5,906	$7,439	$4,558	$4,043	$2,474	$4,877
107 Benefit Administration	$53,177	$52,891	$38,123	$48,025	$29,422	$26,102	$15,970	$31,483
109 Organizational Development		$80,009		$40,004	$40,004			
111 Employment Relations	$17,676	$17,581	$12,672	$15,963	$9,780	$8,677	$5,308	$10,464
114 Recruitment & Testing	$30,091					$30,091		
701 Accounting	$60,295	$59,971	$43,226	$54,454	$33,360	$29,596	$18,108	$35,697
702 Strategic Facilities	$58,822	$53,931	$46,807	$36,642	$25,179	$17,459	$18,013	$21,372
703 Communications	$19,964	$19,857	$14,312	$18,030	$11,046	$9,799	$5,996	$11,819
708 Purchasing	$7,440	$6,010	$7,727	$2,861	$1,145	$286	$5,438	$5,724
710 Vehicle Maintenance							$8,847	
801 Technical Library	$2,586	$2,573	$1,855	$2,336	$1,431	$1,270	$777	$1,531
712 Information Management Records & Content	$88,283	$88,283	$88,283	$88,283	$27,368		$13,242	$16,773
725 Information Systems Software Development	$394,253	$394,253	$394,253	$394,253	$122,218		$59,138	$74,908
726 Information Technology Engineering & Operations	$87,219	$86,750	$62,528	$78,769	$48,257	$42,812	$26,194	$51,637
Subtotal	$1,011,479	$1,318,221	$1,286,592	$912,757	$430,775	$238,839	$221,305	$348,686
Proposed Costs	$1,011,479	$1,318,221	$1,286,592	$912,757	$430,775	$238,839	$221,305	$348,686

Bay Area Air Quality Management District

Allocated Costs by Department

Central Service Departments	605 Mobile Source Measures	608 Climate Protection	609 Community Air Risk Evaluation (CARE)	611 Rule Development	802 Ambient Air Monitoring	803 Laboratory	804 Source Test	805 Meteorology
104 Executive Office	$26,167	$27,969	$22,707	$40,873	$117,573	$41,882	$94,577	$46,279
121 Board of Directors	$3,310	$3,537	$2,873	$5,170	$14,871	$5,297	$11,963	$5,854
123 Advisory Council	$866	$926	$751	$1,353	$3,889	$1,385	$3,129	$1,531
201 Legal counsel								
202 Hearing Board Proceedings								
203 Penalties Enforcement & Settlement	$3,079	$3,292	$2,673	$4,811	$13,837	$4,930	$11,131	$5,447
205 Litigation	$3,519	$3,762	$3,053	$5,497	$15,812	$5,632	$12,719	$6,224
301 Public Information	$9,455	$10,106	$8,204	$14,768	$42,482	$15,133	$34,173	$16,722
302 Community Outreach	$7,988	$8,538	$6,932	$12,478	$35,892	$12,786	$28,872	$14,128
106 Payroll	$3,219	$3,440	$2,793	$5,027	$14,463	$5,152	$11,634	$5,693
107 Benefit Administration	$20,779	$22,209	$18,031	$32,456	$93,361	$33,257	$75,101	$36,749
109 Organizational Development		$40,004					$40,004	
111 Employment Relations	$6,906	$7,382	$5,993	$10,788	$31,033	$11,055	$24,963	$12,216
114 Recruitment & Testing					$15,045	$15,045		
701 Accounting	$23,560	$25,182	$20,445	$36,801	$105,858	$37,709	$85,153	$41,668
702 Strategic Facilities	$22,393	$24,733	$22,542	$42,533	$79,493	$28,943	$56,441	$22,053
703 Communications	$7,800	$8,338	$6,770	$12,185	$35,050	$12,486	$28,195	$13,797
708 Purchasing	$4,293	$4,006	$11,160	$4,006	$205,182	$61,812	$167,409	$30,620
710 Vehicle Maintenance					$141,551		$132,705	$88,470
801 Technical Library	$1,011	$1,081	$877	$1,578	$4,541	$1,618	$3,653	$1,787
712 Information Management Records & Content	$3,531	$31,782	$26,485	$67,096	$5,297	$39,728	$83,869	$24,720
725 Information Systems Software Development	$15,771	$141,931	$118,276	$299,633	$23,655	$177,414	$374,541	$110,391
726 Information Technology Engineering & Operations	$34,080	$36,427	$29,574	$53,233	$153,127	$54,548	$123,178	$60,275
Subtotal	$197,727	$404,645	$310,139	$650,286	$1,152,012	$565,812	$1,403,410	$544,624
Proposed Costs	$197,727	$404,645	$310,139	$650,286	$1,152,012	$565,812	$1,403,410	$544,624

Bay Area Air Quality Management District

Allocated Costs by Department

Central Service Departments	807 Air Monitoring Instrument Performance Evaluation	809 BioWatch Monitoring	307 Carl Moyer Program Administration	310 Mobile Source Incentive Fund Admin.	312 Vehicle Buy-Back Program	311 Carbon Offset Fund	313 Grant Program Development	322 California Goods Movement Bond-School Bus Admin.
104 Executive Office	$31,285	$648	$28,186	$35,250	$1,226	$2,090		
121 Board of Directors	$3,957	$82	$3,565	$4,458	$155	$264		
123 Advisory Council	$1,035	$21	$932	$1,166	$41	$69		
201 Legal counsel			$761					
202 Hearing Board Proceedings								
203 Penalties Enforcement & Settlement	$3,682	$76	$3,317	$4,149	$144	$246		
205 Litigation	$4,207	$87	$3,791	$4,741	$165	$281		
301 Public Information	$11,304	$234	$10,185	$12,736	$443	$756		
302 Community Outreach	$9,550	$198	$8,604	$10,761	$374	$638		
106 Payroll	$3,849	$80	$3,467	$4,336	$151	$257		
107 Benefit Administration	$24,843	$515	$22,381	$27,991	$973	$1,660		
109 Organizational Development			$40,007					
111 Employment Relations	$8,258	$171	$7,440	$9,304	$324	$552		
114 Recruitment & Testing	$30,091		$15,050					
701 Accounting	$28,168	$584	$25,377	$31,738	$1,103	$1,882		
702 Strategic Facilities	$20,820	$1,361	$6,912	$3,934	$1,085	$595	$2,233	$1,424
703 Communications	$9,327	$193	$8,403	$10,508	$366	$624		
708 Purchasing	$31,193	$286	$22,321	$9,443	$3,720			$572
710 Vehicle Maintenance							$8,847	
801 Technical Library	$1,208	$25	$1,089	$1,361	$48	$81		
712 Information Management Records & Content	$2,650							
725 Information Systems Software Development	$11,828							
726 Information Technology Engineering & Operations	$40,747	$845	$36,710	$45,910	$1,596	$2,723		
Subtotal	$278,002	$5,406	$248,498	$217,786	$11,914	$12,718	$11,080	$1,996
Proposed Costs	$278,002	$5,406	$248,498	$217,786	$11,914	$12,718	$11,080	$1,996

Bay Area Air Quality Management District

Allocated Costs by Department

Central Service Departments	323 California Goods Movement Bond-Grants Admin.	304 Smoking Vehicle Program	306 Intermittent Control Programs	308 Transportation Fund for Clean Air Admin.	Subtotal	Direct Billed	Unallocated	Total
104 Executive Office	$60,696	$27,249	$37,917	$41,666	$1,975,879			$1,975,879
121 Board of Directors	$7,677	$3,447	$4,796	$5,270	$249,921			$249,921
123 Advisory Council	$2,008	$901	$1,255	$1,379	$65,362			$65,362
201 Legal counsel					$1,640,399		$16,569	$1,656,968
202 Hearing Board Proceedings					$410,996			$410,996
203 Penalties Enforcement & Settlement	$7,143	$3,207	$4,462	$4,904	$1,258,841			$1,258,841
205 Litigation	$8,163	$3,665	$5,100	$5,604	$404,921		$9,600	$414,521
301 Public Information	$21,931	$36,303	$108,385	$15,055	$872,179			$872,179
302 Community Outreach	$18,529	$30,784	$91,971	$12,719	$737,558			$737,558
106 Payroll	$7,466	$3,352	$4,665	$5,125	$243,050			$243,050
107 Benefit Administration	$48,197	$21,637	$30,109	$33,085	$1,568,979			$1,568,979
109 Organizational Development	$40,004			$40,004	$520,057			$520,057
111 Employment Relations	$16,020	$7,192	$10,008	$10,997	$521,523			$521,523
114 Recruitment & Testing				$30,091	$255,777			$255,777
701 Accounting	$54,649	$24,533	$34,139	$37,514	$1,779,011			$1,779,011
702 Strategic Facilities	$2,828	$6,167	$8,336	$11,314	$1,101,081			$1,101,081
703 Communications	$18,094	$8,123	$11,304	$12,421	$589,041			$589,041
708 Purchasing	$343,402	$858	$572	$19,459	$1,058,823			$1,058,823
710 Vehicle Maintenance					$1,079,330			$1,079,330
801 Technical Library	$2,344	$1,052	$1,465	$1,609	$76,318			$76,318
712 Information Management Records & Content					$1,110,604			$1,110,604
725 Information Systems Software Development					$4,959,707			$4,959,707
726 Information Technology Engineering & Operations	$79,052	$35,489	$49,384	$54,266	$2,573,397			$2,573,397
Subtotal	$738,203	$213,959	$403,868	$342,482	$25,052,754		$26,169	$25,078,923
Proposed Costs	$738,203	$213,959	$403,868	$342,482	$25,052,754		$26,169	$25,078,923

Bay Area Air Quality Management District

Summary of allocation basis

Department	Basis of allocation
104 - 104 Executive Office	
1.003 District Wide Support	Number of Staff per Program / Section
121 - 121 Board of Directors	
2.003 District Wide Support	Number of Staff per Program / Section
123 - 123 Advisory Council	
3.003 District Wide Support	Number of Staff per Program / Section
201 - 201 Legal counsel	
4.003 Permitted Sources	FY 10 Permitted Sources Revenue per Program
4.004 Direct Support	Percentage of Time Spent in Support of Programs / Sections
202 - 202 Hearing Board Proceedings	
5.003 Direct Support	Direct Allocation to Permit Renewals
203 - 203 Penalties Enforcement & Settlement	
6.003 District Wide Support	Number of Staff per Program
6.004 Permitted Sources	FY 10 Permitted Sources Revenue per Program
6.005 Direct Support	Percentage of Time Spent in Support of Permit Renewals and Title V
205 - 205 Litigation	
7.003 District Wide Support	Number of Staff per Program / Section
7.004 Permitted Sources	FY 10 Permitted Sources Revenue per Program
7.005 Direct Support	Percentage of Time Spent in Support of Permit Renewals and Title V
301 - 301 Public Information	
8.003 District Wide Support	Number of Staff per Program / Section
8.004 Permitted Sources	FY 10 Permitted Sources Revenue per Program
8.005 Direct Support	Percentage of Time Spent in Support of Programs / Sections
302 - 302 Community Outreach	
9.003 District Wide Support	Number of Staff per Program / Section
9.004 Permitted Sources	FY 10 Permitted Sources Revenue per Program
9.005 Direct Support	Percentage of Time Spent in Support of Programs / Sections
106 - 106 Payroll	
10.003 District Wide Support	Number of Staff per Program / Section
107 - 107 Benefit Administration	
11.003 District Wide Support	Number of Staff per Program / Section

Bay Area Air Quality Management District

Summary of allocation basis

Department	Basis of allocation
109 - 109 Organizational Development	
12.003 District Wide Support	Number of Classes Provided per Program / Section
111 - 111 Employment Relations	
13.003 District Wide Support	Number of Staff per Program / Section
114 - 114 Recruitment & Testing	
14.003 District Wide Support	Number of Recruitments per Program / Section
701 - 701 Accounting	
15.003 District Wide Support	Number of Staff per Program / Section
702 - 702 Strategic Facilities	
16.003 Maintenance	Square Footage by Program / Section
703 - 703 Communications	
17.003 District Wide Support	Number of Staff per Program / Section
708 - 708 Purchasing	
18.003 Disctrict Wide Support	Number of Purchase Orders per Department / Program
710 - 710 Vehicle Maintenance	
19.003 District Wide Support	Number of Vehicles per Program / Section
801 - 801 Technical Library	
20.003 District Wide Support	Number of Staff per Program / Program
712 - 712 Information Management Records & Content	
21.003 District Wide Support	Percent Labor in Fee Schedules
725 - 725 Information Systems Software Development	
22.003 District Wide Support	Percent Labor in Fee Schedules
726 - 726 Information Technology Engineering & Operations	
23.003 District Wide Support	Number of Staff per Program / Section

AGENDA: 11

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 20, 2011

Re: Public Hearing to Consider Adoption of Proposed Amendments to Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters; and to Regulation 1: General Provisions and Definitions; and to Consider Approval of an Addendum to the 2008 CEQA Negative Declaration for Regulation 9, Rule 7

RECOMMENDED ACTION:

Staff recommends that the Board of Directors take the following actions:

- Adopt proposed amendments to Regulation 9, Rule 7 (Regulation 9-7): Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters;
- Adopt proposed amendments to Regulation 1: General Provisions and Definitions; and
- Approve an Addendum to the 2008 California Environmental Quality Act (CEQA) Negative Declaration for amendments to Regulation 9-7.

BACKGROUND

In July, 2008, the Board of Directors adopted amendments to Regulation 9-7 to reduce nitrogen oxide (NOx) and carbon monoxide (CO) emissions from boilers, steam generators and process heaters. The amendments to Regulation 9-7:

- Expanded the rule applicability for smaller devices - those that are fueled by natural gas and LPG with an input heat rating of greater than 2 million (MM) BTU/hr up to 10 MM BTU/hr - and established NOx and CO emission limits for these smaller devices;
- Reduced the NOx emission limits for devices already subject to this rule - gas-fired devices with an input heat rating of 10 MM BTU/hr or more;
- Established an emissions certification requirement for manufacturers of the smaller devices (>2 and <10 MM BTU/hr) and established operator registration requirements for new and existing devices in this size range; and
- Established insulation requirements, stack gas temperature limits and annual tune-up requirements to ensure reasonable energy efficiency and reduce fuel use and the associated NOx and greenhouse gas emissions.

DISCUSSION

In expanding Regulation 9-7 to apply to smaller devices (greater than 2 MM to less than 10 MM BTU/hr), the Air District extended the rule applicability to a large number of previously-unregulated people and sources. The 2008 amendments sought to minimize the cost and complexity of demonstrating compliance with the Rule for smaller operators in two ways. First, the 2008 Amendments allowed the owners of these smaller devices to register the devices with the Air District, instead of undergoing a more expensive and complex permitting process. Second, the 2008 Amendments required manufacturers to certify their heaters for compliance with the new requirements before offering them for sale within the Air District. This latter approach partially shifted the burden of understanding and complying with Regulation 9-7 requirements from the smaller heater operators to the manufacturers.

On January 1, 2011, new emission limits for heaters rated greater than 2 to 5 MM BTU/hr went into effect, along with the requirement that only pre-certified heaters in this size range be sold in the Air District. For devices rated greater than 5 to less than 10 MM BTU/hr, the emissions limits and certification requirement will go into effect on January 1, 2012. Although heaters in both size ranges that comply with Regulation 9-7 emission limits are available in California, no manufacturer has yet applied to the Air District to certify a heater model for sale in the Bay Area in either size range. As a result, persons who must purchase a new heater to comply with the new emission limits of the 2008 amendments cannot do so and also comply with the requirement to install only a pre-certified device.

The current proposed amendments to Regulation 9-7 would extend the emissions requirement compliance dates for devices rated greater than 2 to 5 MM BTU/hr from January 1, 2011 to January 1, 2013, and for devices rated greater than 5 to less than 10 MM BTU/hr from January 1, 2012 to January 1, 2013, and would require that only pre-certified devices in both size ranges be sold beginning on January 1, 2012. Also, the Air District proposes to allow additional test methods, including U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) methods, for certification of emission rates. The use of these additional test methods will expedite certification. The amendments would also make a number of minor corrections and clarifications to Regulation 9, Rule 7.

Minor amendments to two sections of Regulation 1: General Provisions and Definitions are also proposed. Section 1-410 would be amended to state that individual pieces of equipment may be required to be registered by Air District rules regardless of whether the Air District permits other equipment in the same facility. The proposed amendments to Section 1-412 would require advance notice for changes to the owner or address of record to ensure that the Air District has current information for addressing official correspondence.

RULE DEVELOPMENT PROCESS

Since the adoption of the 2008 amendments, Air District staff has participated in a number of workshops, training sessions and other forums to explain new requirements of Regulation 9-7. Air District staff has participated in several multi-day workshops sponsored by a local heater distributor (R F MacDonald), attended by hundreds of boiler operators. Staff has also participated in two web conferences sponsored by PG&E energy efficiency contractor Enovity, and has made presentations to facility managers with the City of San Francisco and the City of

Palo Alto. Air District staff has also made a presentation to a local chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

More recently, staff has undertaken an extensive inspection and outreach program to evaluate compliance with rule requirements and to ensure that these requirements are understood by operators and manufacturers. In conjunction with these inspections, staff has mailed compliance advisories to over 3000 heater operators, manufacturers, industry groups and other stakeholders.

Air District staff updated the Board of Directors Stationary Source Committee on this rule development process on March 3, 2011 and circulated a draft rule for public comment on March 17, 2011.

After consideration of public comments, the final proposed amendments and staff report were posted on April 4, 2011. As of April 18, 2011, no comments have been received on the proposed final amendments to Regulation 9-7.

ENVIRONMENTAL IMPACTS

An Initial Study for the 2008 amendments was prepared by Environmental Audit, Inc. This Initial Study concluded that the proposed amendments would not have any significant adverse environmental impacts. The Initial Study and a Negative Declaration were approved by the Board of Directors on July 30, 2008. An addendum to the 2008 CEQA Negative Declaration has been prepared and it concludes that the current proposed amendments would not have significant adverse environmental impacts, that the amendments do not affect the analysis or conclusions in the 2008 CEQA Negative Declaration, and that no additional Initial Study, Environmental Impact Report or Negative Declaration is required. The addendum is also proposed for approval.

SOCIOECONOMIC IMPACTS

A socioeconomic analysis for the 2008 amendments was prepared by Applied Development Economics. This analysis concluded that the cost of the proposed amendments would not have a significant impact on affected businesses. An addendum to the 2008 socioeconomic analysis has also been prepared by Applied Development Economics and concludes that the proposed amendments will create no costs beyond those associated with the 2008 amendments.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS:

None. No new programs or rule requirements beyond those created by the 2008 amendments are proposed now.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/Air Pollution Control Officer

Prepared by: Julian Elliot
Reviewed by: Henry Hilken

Attachments:

Proposed amendments to Regulation 9-7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters

Proposed amendments to Regulation 1

Staff Report, including Appendices:

A. 2008 Socioeconomic Analysis and 2011 Addendum
B. 2008 CEQA Initial Study and Negative Declaration and 2011 Addendum

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INORGANIC GASEOUS POLLUTANTS
RULE 7
NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL, INSTITUTIONAL~~,~~ AND COMMERCIAL BOILERS, STEAM GENERATORS~~,~~ AND PROCESS HEATERS

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 7
NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS

(Adopted September 16, 1992)

9-7-100 GENERAL

9-7-101 Description: This rule limits the emissions of nitrogen oxides (NOx) and carbon monoxide (CO) from industrial, institutional, and commercial boilers, steam generators, and process heaters.

9-7-110 Exemptions: The requirements of this rule shall not apply to the following:

110.1 Boilers, steam generators, and process heaters with a rated heat input of 2 million BTU/hour or less, if fired exclusively with natural gas, liquefied petroleum gas (LPG), or any combination thereof;

110.2 Boilers, steam generators and process heaters with a rated heat input less than 1 million BTU/hour fired with any fuel;

110.3 Boilers, steam generators, and process heaters that are used in petroleum refineries;

110.4 Boilers used by public electric utilities or qualifying small power production facilities, as defined in Section 228.5 of the Public Utilities Code, to generate electricity;

110.5 Waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines or reciprocating internal combustion engines;

110.6 Kilns, ovens, and furnaces used for drying, baking, heat treating, cooking, calcining~~,~~ or vitrifying.

110.7 Process heaters used to heat thermal fluid for radiant comfort heating.

(Amended July 30, 2008)

9-7-111 Limited Exemption, Low Fuel Usage - Section 9-7-301: The requirements of Section 9-7-301 shall not apply to the use of any boiler, steam generator, or process heater with an annual heat input less than 90,000 therms during each consecutive 12-month period after July 1, 1993, or that accepts a limiting condition in their operating permit to limit the annual heat input to less than 90,000 therms, provided the requirements of Sections 9-7-304 and 504 are satisfied. This exemption is not valid for a boiler, steam generator, or process heater that is subject to the requirements of Section 9-7-307 after the effective date of the applicable standard in that section.

(Amended July 30, 2008)

9-7-112 Limited Exemption, Low Fuel Usage - Section 9-7-307: The requirements of Sections 9-7-301, ~~9-7-~~307 ~~(except as specified below)~~, 311 and 312 shall not apply to the use of any boiler, steam generator, or process heater that was first operated prior to January 1, 2012 provided that all of the following conditions are met:

112.1 For devices with a rated heat input less than 10 million BTU/hr, the device uses less than 10% of its annual maximum heat capacity in each consecutive 12-month period beginning January 1, 2012~~2011~~ and the requirements of Sections 9-7-309 and 504 are satisfied;

112.2 For devices with a rated heat input of 10 million BTU/hr or more, the device uses less than 10% of its annual maximum heat capacity in each consecutive 12-month period beginning January 1, 2012 and the requirements of Section 9-7-~~307.10~~ 504 are satisfied and the device does not exceed a NOx exhaust concentration of 30 ppmv or a CO exhaust concentration of 400 ppmv, both dry at 3 percent oxygen.

A boiler, steam generator, or process heater that uses 10% of more of its annual maximum heat capacity in any consecutive 12-month period after the effective date specified in Section 9-7-112.1 or 112.2, as applicable, shall not thereafter be eligible

for this exemption. An operator of a boiler, steam generator, or process heater that loses eligibility for this exemption by using more than the specified amount of fuel in any consecutive 12-month period shall comply with the applicable standards of Section 9-7-307 within 24 months.

(Adopted July 30, 2008)

9-7-113 **Limited Exemption, Natural Gas Curtailment and Testing:** The requirements of Section 9-7-307 shall not apply to any boiler, steam generator or process heater while it burns ~~LPG or other~~ non-gaseous fuel during a natural gas curtailment or during testing to verify readiness for such a curtailment, provided that all of the following conditions are met:

113.1 The device does not burn ~~LPG or other~~ non-gaseous fuel for more than 168 total hours in each consecutive 12-month period, plus 48 hours in each consecutive 12-month period for oil-burn readiness testing or state, federal, or local agency-required performance testing,

113.2 The device does not exceed a NOx exhaust concentration of 150 ppmv, dry at 3 percent oxygen, and

113.3 The records specified in Section 9-7-503.3 are maintained.

(Adopted July 30, 2008)

9-7-114 **Limited Exemption, Tune-Up:** The emission limits of Section 9-7-307 shall not apply during the tune-up of a boiler, steam generator or process ~~heater required by Section 9-7-313. Emissions shall be minimized to the extent possible during the exemption period and the tune-up shall be completed in as little time as necessary~~.

(Adopted July 30, 2008)

9-7-115 **Limited Exemption, Startup and Shutdown:** The emission limits of Section 9-7-307 shall not apply during startup and shutdown periods provided that all of the following conditions are met:

115.1 Each startup and shutdown period shall not exceed two hours, unless otherwise allowed in a District Permit to Operate. In no case shall the startup period exceed 12 hours, or the shutdown period exceed 9 hours.

115.2 All emission control systems shall be in operation and emissions shall be minimized, to the extent possible, during startup and shutdown periods.

(Adopted July 30, 2008)

9-7-116 **Limited Exemption, Compliance Extension for Facilities Subject to Regulation 9, Rule 9:** Boilers, steam generators or process heaters located at the same facility as a turbine that is subject to Regulation 9, Rule 9 and that is modified or replaced to comply with Section 9-9-301.2 of that regulation, shall comply with the requirements of Section 9-7-307 no later than 24 months after the date otherwise specified for compliance in Section 9-7-308.

(Adopted July 30, 2008)

9-7-117 **Limited Exemption, Devices Rated 75 MM BTU/hr or Higher Limited to 9 PPMV NOx:** The emission limits of Section 9-7-307.6 shall not apply to any boiler, steam generator or process heater that is limited to 9 ppmv NOx or less by a District Permit to Operate in effect on or before July 30, 2008 as long as that permit limit remains in effect.

(Adopted July 30, 2008)

9-7-200 **DEFINITIONS**

9-7-201 **Annual Heat Input:** The total heat input of fuels burned by a combustion source during any consecutive 12-month period, as determined from the higher heating value and cumulative annual usage of each fuel.

9-7-202 **Annual Maximum Heat Capacity:** The amount of heat input that a device would have if it operated at its rated heat input continuously for 365 consecutive days.

(Adopted July 30, 2008)

9-7-203 **Boiler or Steam Generator:** Any combustion equipment used to produce steam ~~or to heat water~~.

(Renumbered July 30, 2008)

9-7-204 **British Thermal Unit (BTU):** The amount of heat required to raise the temperature of one pound of water from 59° to 60°F at one atmosphere.

(Renumbered July 30, 2008)

9-7-205 **Digester Gas:** Gas derived from the decomposition of organic matter in a digester.

(Adopted July 30, 2008)

9-7-206 **Digester Gas-Fired Device:** A boiler, steam generator or process heater that fires or co-fires digester gas at least 90% of its operating time, on a calendar year basis.

(Adopted July 30, 2008)

9-7-207 **Gaseous Fuel:** Any fuel that is a gas at 68°F and one atmosphere.

(Adopted July 30, 2008)

9-7-208 **Heat Input:** The heat of combustion released due to burning a fuel in a source, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

(Renumbered July 30, 2008)

9-7-209 **Heat-Input Weighted Average Limit:** ~~The heat input of the gaseous fuel per unit time divided by the total heat input per unit time and the heat input per unit time of the non-gaseous fuel divided by the total heat input per unit time. The calculated fractions are used to calculate the applicable weighted average ppmv emission limit of Section 9-7-301.3.~~For devices using fuels with different NOx limits, the applicable limit is the heat-input weighted average of the limits for each fuel used, which is:

Σ ((heat input for a fuel) x (NOx limit for that fuel)) for all fuels used, divided by: (total heat input for all fuels).

(Amended, Renumbered July 30, 2008)

9-7-210 **Higher Heating Value (HHV):** The total heat liberated per mass of fuel burned (BTU per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. The HHV is determined as specified in Section 9-7-605.

(Renumbered July 30, 2008)

9-7-211 **Landfill Gas:** Gas derived from the decomposition of waste in a landfill.

(Adopted July 30, 2008)

9-7-212 **Landfill Gas-Fired Device:** A boiler, steam generator or process heater that fires or co-fires landfill gas at least 90% of its operating time, on a calendar year basis.

(Adopted July 30, 2008)

9-7-213 **Load-Following Unit:** A unit that cannot be operated in a base-loaded mode, and that has normal operational load fluctuations and requirements, imposed by fluctuations in the process(es) served by the unit, that exceed the operational response range of a Ultra-Low NOx burner system operating at 9 ppmv NOx, as determined by the District and indicated on the device's permit to operate.

(Adopted July 30, 2008)

9-7-214 **Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.

(Renumbered July 30, 2008)

9-7-215 **Natural Gas Curtailment:** A shortage in the supply of pipeline natural gas, due solely to supply limitations or restrictions in distribution pipelines by the utility supplying the gas, and not due to the cost of natural gas.

(Adopted July 30, 2008)

9-7-216 **Nitrogen Oxide (NOx) Emissions:** The sum of nitric oxide (NO) and nitrogen dioxide (NO_2) in the flue gas, collectively expressed as nitrogen dioxide.

(Renumbered July 30, 2008)

9-7-217 **Process Heater:** Any combustion equipment that transfers heat from combustion gases to water or process streams.~~ A process heater does not include any kiln, furnace or oven that is used for drying, baking, heat treating, cooking, calcining, or vitrifying. A process heater also does not include a space heating device that is primarily intended to only heat ambient air.~~

(Amended, Renumbered July 30, 2008)

9-7-218 **Rated Heat Input:** The heat input capacity specified on the nameplate of the boiler, steam generator or process heater, or the sum of the capacities on the nameplates of the burners in the boiler, steam generator or process heater, whichever is greater.

(Amended, Renumbered July 30, 2008)

9-7-219 **Shutdown Period:** The period of time during which a unit is taken from an operational to a non-operational status.

(Adopted July 30, 2008)

9-7-220 **Startup Period:** The period of time during which a unit is brought from a non-operational status to operating temperature, including the time required for the unit's emission control system to reach full operation.

(Adopted July 30, 2008)

9-7-221 **Therm:** One hundred thousand (100,000) BTU's.

(Renumbered July 30, 2008)

9-7-300 STANDARDS

9-7-301 **Interim Emission Limits:** No person shall operate a boiler, steam generator or process heater with a rated heat input greater than or equal to 10 million BTU per hour unless the following emission limits are met:

301.1 Nitrogen oxide (NOx) emissions shall not exceed 30 ppmv, dry at 3 percent oxygen when gaseous fuel is used;

301.2 Nitrogen oxide (NOx) emissions shall not exceed 40 ppmv, dry at 3 percent oxygen when non-gaseous fuel is used;

301.3 Nitrogen oxide (NOx) emissions shall not exceed the heat-input weighted average of the limits in Sections 9-7-301.1 and 301.2 when a combination of gaseous and non-gaseous fuel is used;

301.4 Carbon monoxide (CO) emissions shall not exceed 400 ppmv, dry at 3 percent oxygen.

This section shall not apply to any boiler, steam generator, or process heater subject to a NOx or CO emission limit in Section 9-7-307.

(Amended July 30, 2008)

9-7-302 **Deleted July 30, 2008**

9-7-303 **Deleted July 30, 2008**

9-7-304 **~~Interim~~ Low Fuel Usage Requirements – Section 9-7-301:** No person shall operate any boiler, steam generator or process heater under the limited exemption in Section 9-7-111, or with rated heat input less than 10 million BTU per hour with the capability of firing any non-gaseous fuel, without doing at least one of the following:

304.1 Operate in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or

304.2 Perform an inspection and tune-up at least once every 12 months by a technician in accordance with the procedure specified in Section 9-7-604; or

304.3 Meet the emission limits specified in Sections 9-7-301.

(Amended July 30, 2008)

9-7-305 **Deleted July 30, 2008**

9-7-306 **Deleted July 30, 2008**

9-7-307 **Final Emission Limits:** No person shall operate a boiler, steam generator or process heater with a rated heat input listed in the table below that exceeds the corresponding NOx and CO emission limits on or after the corresponding effective date specified in Section 9-7-308.~~ Where more than one NOx limit applies to a device, the device will be subject only to the higher (less restrictive) NOx limit.~~

Emission Limit	Rated Heat Input (million BTU/hr)	Fuel	NOx Limit (ppmv, dry at 3% oxygen)	CO Limit (ppmv, dry at 3% oxygen)
307.1	>2 to 5	gaseous, except landfill or digester gas	30	400
307.2	>5 to <10		15	400
307.3	10 to <20		15	400
307.4	20 or more, load-following unit		15	400
307.5	20 to <75		9	400
307.6	75 or more		5	400
307.7	~~10 or more, landfill gas-fired or digester gas-fired device~~1 or more	landfill or digester	30	400

		gas		
307.8	1 or more ~~while firing only non-gaseous fuel~~	non-gaseous	40	400
307.9	1 or more ~~while firing a combination of gaseous and non-gaseous fuel~~	multiple fuels	heat-input weighted average limit~~of gaseous & non-gaseous limit~~	400
~~307.10~~	~~10 or more, while operated under exemption 9-7-112.2~~		~~30~~	~~400~~

(Adopted July 30, 2008)

9-7-308 **Compliance Schedule:** Boilers, steam generators and process heaters subject to the requirements of Section 9-7-307 shall comply with those requirements in accordance with the schedule in the table below.

~~**Section**~~ **Applicable NOx Limit**	**At least 33% of devices at a single facility**	**At least 66% of devices at a single facility**	**100% of devices at a single facility**
9-7-307.1 9-7-307.2	Effective Date: ~~Later of~~ January 1, 2013~~2011 OR 10 years after original manufacture date if manufactured prior to January 1, 2011~~	One year after Effective Date	Two years after Effective Date
~~9-7-307.2~~ ~~9-7-307.3~~	~~Effective Date: Later of January 1, 2012 OR 10 years after original manufacture date if manufactured prior to January 1, 2012~~	~~One year after Effective Date~~	~~Two years after Effective Date~~
9-7-307.3 9-7-307.4 9-7-307.5 9-7-307.6	Effective Date: ~~Later of~~ January 1, 2012 ~~OR 5 years after original manufacture date if manufactured prior to January 1, 2012~~	One year after Effective Date	Two years after Effective Date
~~9-7-307.7~~ ~~9-7-307.10~~	~~July 30, 2008~~	~~July 30, 2008~~	~~July 30, 2008~~
9-7-307.7 9-7-307.8 9-7-307.9	Effective Date: January 1, 2013~~2011~~ for devices with rated input <10 MM BTU/hr; July 30, 2008 for devices with rated input ≥10 MM BTU/hr	One year after Effective Date	Two years after Effective Date

(Adopted July 30, 2008)

For the purpose of complying with the required minimum percentages shown in this table, all boilers, steam generators and process heaters at a single facility with rated heat inputs less than 10 MM BTU/hr, including those subject to Section 9-7-112, may be grouped. All other boilers, steam generators and process heaters at a single facility, including those subject to Section 9-7-112, may be grouped, except for those that are subject to Sections 307.7, 307.8 or 307.9 that also have an effective date of July 30, 2008.

308.1 Notwithstanding the indicated minimum percentages, boilers, steam generators and process heaters rated >2 to 5 MM BTU/hr shall have an effective date 10 years after original manufacture date if manufactured prior to January 1, 2011, IF this is later than the normal effective date.

308.2 Notwithstanding the indicated minimum percentages, boilers, steam generators and process heaters rated >5 to <20 MM BTU/hr shall have an

effective date 10 years after original manufacture date if manufactured prior to January 1, 2012, IF this is later than the normal effective date.

308.3 Notwithstanding the indicated minimum percentages, boilers, steam generators and process heaters rated 20 MM BTU/hr or higher shall have an effective date 5 years after original manufacture date if manufactured prior to January 1, 2012, IF this is later than the normal effective date.

9-7-309 ~~**Final**~~ **Low Fuel Usage Requirements – Section 9-7-307:** No person shall operate any boiler, steam generator or process heater under the limited exemption in Section 9-7-112.1 without doing at least one of the following:

~~309.1 Operate in a manner that maintains stack gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or~~

309.2 Perform an inspection and tune-up at least once per calendar year by a technician in accordance with the procedure specified in Section 9-7-604; or

309.3 Meet the applicable emission limits in Section 9-7-307.

(Adopted July 30, 2008)

9-7-310 **Prohibition of Commerce in Uncertified Devices:** Effective January 1, 2012, no~~No~~ person shall sell, offer for sale, or install any boiler, steam generator or process heater subject to Section 9-7-307.1 or 307.2 unless the device is certified to comply with the applicable standards of these sections by the APCO. ~~in accordance with Sections 9-7-405 and 406~~. This certification requirement shall not apply to burner assembly retrofit packages, or to devices installed in accordance with a District Permit to Operate.

(Adopted July 30, 2008)

9-7-311 **Insulation Requirements:** ~~Effective January 1, 2010, n~~No person shall operate a boiler or steam generator unless the exposed, external surface of the device, including all pipes and ducts heated by the device, does not exceed a temperature of 120ºF. This requirement shall not apply to any of the following:

311.1 Any device that meets the definition of a high-temperature water boiler in California Code of Regulations, Title 8.

311.2 Any surface or appurtenance that must remain un-insulated for safety or operational reasons.

311.3 Any surface that has at least one inch of insulation~~, or that does not exceed a temperature of 140ºF with no insulation~~.

311.4 Any surface heated by a source other than the boiler or steam generator, including sunlight.

311.5 Any exhaust stack surface.

(Adopted July 30, 2008)

9-7-312 **Stack Gas Temperature Limits:** Effective January 1, 2013~~2011~~, no person shall operate a boiler or steam generator with a stack gas temperature (downstream of any economizer) that exceeds the indicated maximum temperature unless the device is certified by the Air-Conditioning, Heating and Refrigeration Institute (AHRI) as having a thermal efficiency of 80% or more:

Heater Design	**Maximum Temperature (ºF)**	
	Gaseous Fuel	**Non-Gaseous Fuel**
firetube	100ºF over saturated steam temperature for steam boiler, 100ºF over hot water temperature for hot water boiler OR 250 ºF greater than combustion air ~~ambient~~ temperature, whichever is higher	100ºF over saturated steam temperature for steam boiler, 100ºF over hot water temperature for hot water boiler OR 300 ºF greater than combustion air ~~ambient~~ temperature, whichever is higher

watertube	150ºF over saturated steam temperature for steam boiler, 150ºF over hot water temperature for hot water boiler OR 250 ºF greater than combustion air ~~ambient~~ temperature, whichever is higher	150ºF over saturated steam temperature for steam boiler, 150ºF over hot water temperature for hot water boiler OR 300 ºF greater than combustion air ~~ambient~~ temperature, whichever is higher

(Adopted July 30, 2008)

~~**9-7-313 Tune-Up Requirements:** Effective January 1, 2009, no person shall operate a boiler, steam generator or process heater unless they do at least one of the following each calendar year:~~

~~313.1 Operate at less than 10% of its annual maximum heat capacity during the calendar year; or~~

~~313.2 Perform an inspection and tune-up at least once per calendar year by a technician in accordance with the procedure specified in Section 9-7-604.~~

(Adopted July 30, 2008)

9-7-400 ADMINISTRATIVE REQUIREMENTS

9-7-401 Deleted July 30, 2008

9-7-402 Deleted July 30, 2008

9-7-403 Initial Demonstration of Compliance: No person shall operate a boiler, steam generator or process heater that is subject to the requirements of Sections 9-7-307.1 through 307.6, or a boiler, steam generator or process heater with a rated heat input less than 10 MM BTU/hr that is subject to the requirements of Sections 9-7-307.7 though 9-7-307.9~~9-7-307.3, 307.4, 307.5, 307.6 or 309.1~~ unless ~~an initial source test to verify~~ compliance with these requirements is verified~~conducted~~ in accordance with Sections 9-7-601 or 602 within 1 year of the date on which these requirements become~~are~~ effective. However, devices with a rated heat input <10 MM BTU/hr may be tested using a portable analyzer in accordance with Section 9-7-606.~~Alternatively, devices subject to Sections 9-7-307.3, 307.4 or 309.1 may be tested using a portable analyzer that meets the specification standards and using the testing protocol in Attachment 1.~~ This section does not apply to any device required to perform verification testing to establish compliance with applicable requirements of Section~~s~~ 9-7-307~~.3, 307.4, 307.5, 307.6 or 309.1~~ in accordance with a District Authority to Construct issued on or after January 1, 2013, or to any device that has had a previous source test performed in accordance with Sections 9-7-601 and 602 that verifies compliance with the applicable requirements of Section 9-7-307, or to any device certified in accordance with Section 9-7-310~~2011~~. The requirements of this section may be satisfied by monitoring emissions with a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522.

(Amended July 30, 2008)

9-7-404 Registration: Effective January 1, 2011, no person shall operate any boiler, steam generator or process heater with a rated heat input greater than 2 and less than 10 million BTU/hr~~ subject to Section 9-7-307.1 or 307.2~~ unless the device is registered with the District~~in accordance with Regulation 1, Section 410~~. Any person registering a device shall pay the fees specified in Regulation 3. This registration requirement shall not apply to any device for which the operator holds a District Permit to Operate.

(Adopted July 30, 2008)

~~**9-7-405 Compliance with Emissions Standards – Devices Rated Less Than 10 Million BTU/hr Input:** The manufacturer shall obtain confirmation from an independent testing laboratory that each boiler, steam generator or process heater model it sells or distributes for sale into the District that is subject to the requirements of Section 9-7-307.1 or 307.2 has been tested in accordance with the procedures in Sections 9-7-601 and 602. This requirement shall not apply to burner assemblies sold as retrofit packages.~~

(Adopted July 30, 2008)

9-7-406 **Application for Certification:** A manufacturer may submit an application to certify compliance with the requirements of Section 9-7-307.1 or 9.7-307.2 for a boiler, steam generator or process heater model that is subject to these requirements. The application shall be made on forms specified by the APCO. The certification application shall include a demonstration that the boiler, steam generator or process heater model was tested in accordance with Section 9-7-606 and found to comply with the requirements of Sections 9-7-307.1 or 9.7-307.2. A portable analyzer may not be used for this testing. After completing review of the application for certification and source test report, the APCO will approve the certification and include the subject model on the list of certified devices, or will deny the certification.

~~406.1 Each manufacturer shall submit an application to the APCO for certification of their compliant boiler, steam generator or process heater model. The application must:~~

~~1.1 Provide the following general information: name and address of manufacturer, brand name, trade name, model number and heat input rating as it appears on the water heater rating plate.~~

~~1.2 Provide a description of the model being certified~~

~~1.3 Include a complete certification source test report demonstrating that the boiler or water heater model was tested in accordance with procedures in Sections 9-7-601 and 602 and a written statement that the model complies with Section 9-7-307.1 or 307.2 and is tested in accordance with procedures in Sections 9-7-601 and 602.~~

~~1.4 Be submitted to the District no more than 90 days after the date of the emissions compliance test conducted in accordance with Section 9-7-405.~~

~~1.5 Be submitted to the District no less than 90 days before the first sale or distribution within the District that occurs on or after January 1, 2011, of a boiler, steam generator or process heater model.~~

~~406.2 After completing review of the application for certification and source test report, the APCO will approve, or will deny approval of the device.~~

~~406.3 Certification status shall be valid for three years from the date of approval by the APCO. After the third year, recertification shall be required according to the requirements in 9-7-406.~~

(Adopted July 30, 2008)

~~**9-7-407** **Identification:** The boiler, steam generator or process heater manufacturer shall display the model number and the certification status of the boiler, steam generator or process heater on the shipping carton and on the rating plate of each unit.~~

(Adopted July 30, 2008)

9-7-408 **Designation of Load-Following Units:** To be eligible for the load-following emission standard in section 9-7-307, a unit must be designated a load-following unit by the APCO on the unit Permit to Operate. In order to support this designation, the unit operator shall include the following information with an application for an Authority to Construct or an application for a modification to a Permit to Operate, as specified in Regulation 2:

408.1 A description of the processes the unit serves and the normal operational load fluctuations and load requirements imposed on the unit, verifying that the unit cannot be operated in a base-loaded mode.

408.2 A detailed report on the design and condition of the unit, burner(s), burner controls, and any other subsystem that may affect the ability of the unit to comply with a 9 ppmv NOx limit, including a verification that the unit is free of air leaks, and is operated within normal design parameters, and is otherwise free of significant design defects and physical defects and is operated within reasonable parameters. This report shall verify that the inability of the unit to comply with a 9 ppmv NOx limit is substantially caused by the system load fluctuations and the limitations of state-of-the-art, commercially-available, 9 ppmv burners and burner controls, rather than any other factor.

408.3 Technical data such as steam demand charts or other information to support the description and report described above.

(Adopted July 30, 2008)

9-7-500 MONITORING AND RECORDS

9-7-501 Combinations of Different Fuels: No person shall simultaneously fire combinations of different fuels in a device subject to the requirements of Sections 9-7-301.3 or 307.9 without first installing a non-resettable totalizing fuel meter in each fuel line for each source.

(Amended July 30, 2008)

9-7-502 Deleted July 30, 2008

9-7-503 Records: Any person subject to the requirements of this rule shall keep records of the following:

503.1 Documentation verifying tune-ups performed in accordance with Sections 9-7-304.2, or 309.2~~ or 313.2~~.

503.2 In the event that the limited exemption in Section 9-7-113 is invoked, documentation from the natural gas supplier verifying that natural gas was unavailable due to a natural gas curtailment.

503.3 Documentation verifying the hours of equipment testing using non-gaseous fuel, and of total operating hours using non-gaseous fuel during each calendar month.

503.4 The results of any testing required by Sections 9-7-403 or 506.

503.5 Digester gas-fired and landfill gas-fired devices operating under Section 9-7-307.7 shall maintain records of total operating hours and operating hours firing or co-firing digester or landfill gas.

Such records shall be retained for a minimum of 24 months from date of entry and be made available to District staff upon request.

(Amended July 30, 2008)

9-7-504 Low Fuel Usage - Monitoring and Records: Any person who operates a boiler, steam generator or process heater under the limited exemption of Section 9-7-111 or 112 shall comply with the following requirements:

504.1 Operate a non-resettable totalizing meter for each fuel that demonstrates that the source operated at or below the applicable heat input level, or receive APCO approval for using utility service meters, purchase or tank fill records, or any other acceptable methods for measuring the cumulative annual usage of each fuel; and

504.2 Have available for inspection by the APCO annual fuel use data and the Higher Heating Value of each fuel used, for the prior consecutive 12-month period. Records shall be maintained and made accessible to the APCO for a period of 24 months from the date the record is made.

An operator of a boiler, steam generator or process heater who claims eligibility for the limited exemption in Section 9-7-111 or 112, but who fails to maintain records to allow verification of fuel usage shall have the burden of proof to establish eligibility for the limited exemption.

(Amended July 30, 2008)

9-7-505 Original Manufacture Date: Any person who operates a boiler, steam generator or process heater that is subject to a standard in Sections 9-7-307.1 through 307.6 and that elects to use an effective date for this standard that is based on the original manufacture date of the device shall make available the original manufacture date of the device on the original manufacturer's identification or rating plate permanently fixed to the device, or else on a copy of the manufacturer's invoice.

(Adopted July 30, 2008)

9-7-506 Periodic Testing: No person shall operate a boiler, steam generator or process heater subject to an emission limit specified in the table below unless they verify compliance with the limit at the specified intervals. Testing shall be performed in accordance with Sections 9-7-601 and 602. Alternatively, devices may be tested using a portable analyzer in accordance with Section 9-7-606~~that meets the specification standards and using the testing protocol in Attachment 1~~. No person shall operate a device that uses non-gaseous fuel unless they perform testing using non-gaseous fuel to verify compliance with Section 9-7-307.8 or 307.9, in addition to testing to verify compliance with any other applicable standard in Section 9-7-307. This section does not apply to any device required to perform periodic testing in

accordance with a District Permit to Operate or to any device that verifies compliance with an emission limit with a ~~District-approved~~ continuous emission monitor that meets the requirements of Regulation 1-522.

Emission Limit	Testing Interval
9-7-307.1 9-7-307.2 9-7-307.3	Every ~~two~~ calendar years ~~(no less than 18 months and no more than 24 months)~~, beginning with the first complete year after the effective date in Section 9-7-308.
9-7-307.4, 9-7-307.5, 9-7-307.6~~, or 9-7-309.1~~	Every calendar year ~~(no less than 10 months and no more than 12 months)~~, beginning with the first complete year after the effective date in Section 9-7-308.
9-7-307.8 or 9-7-307.9	Within 60 days of the first use of non-gaseous fuel in any calendar year in which non-gaseous fuel is used. Use of non-gaseous fuel under limited exemption in Section 9-7-113 shall not trigger this requirement~~for oil-burn readiness testing or state, federal, or local agency-required performance testing, not exceeding a total of 48 hours in a calendar year, will not trigger periodic testing~~.

(Adopted July 30, 2008)

9-7-600 MANUAL OF PROCEDURES

9-7-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District Manual of Procedures, Volume IV, ST-13-A ~~or B~~.

9-7-602 Determination of Carbon Monoxide and Stack-Gas Oxygen: Compliance with the carbon monoxide emission requirements of Sections 9-7-301 and 307 and the stack-gas oxygen concentration requirement of Sections 9-7-304.1 and 309.1 shall be determined as set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).

(Amended July 30, 2008)

9-7-603 Compliance Determination: All emission determinations shall be made in the as-found operating condition, except that no compliance determination shall be established during startup or shutdown.

(Amended July 30, 2008)

9-7-604 Tune-Up Procedures: The tune-up procedure required by Sections 9-7-304.2 and~~,~~ 309.2 ~~and 313.2~~ shall be performed in accordance with the procedure set forth in the District Manual of Procedures, Volume I, Chapter 5.

(Adopted 9/15/93; Amended 7/30/08)

9-7-605 Determination of Higher Heating Value: If certification of the Higher Heating Value is not provided by the third-party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88, or ASTM D1945-81 in conjunction with ASTM D3588-89, for gaseous fuels.

9-7-606 Certification, Initial Demonstration of Compliance and Periodic Test Methods: The test methods specified in the following table may be used to perform an initial demonstration of compliance in accordance with Section 9-7-403, establish equipment certification in accordance with Section 9-7-406, and also to perform periodic monitoring in accordance with Section 9-7-506. Portable analyzers may only be used where explicitly allowed in Sections 9-7-403 and 506. In addition, any other test method approved for this purpose by the Air Pollution Control Officer of the

District and by the regional administrator of the United States Environmental Protection Agency may also be used.

Emission Limit or Parameter	**Test Method**
NOx (ppmv)	1. BAAQMD Manual of Procedures, Volume IV, ST-13 A 2. California Air Resources Board Method 100 3. U.S. EPA Method 7E 4. U.S. EPA Method CTM-030 (if portable analyzer use is allowed)
CO (ppmv)	1. BAAQMD Manual of Procedures, Volume IV, ST-6 2. California Air Resources Board Method 100 3. U.S. EPA Method 10 4. U.S. EPA Method CTM-030 (if portable analyzer use is allowed)
oxygen (%)	1. BAAQMD Manual of Procedures, Volume IV, ST-14 2. California Air Resources Board Method 100 3. U.S. EPA Method 3 or 3A 4. U.S. EPA Method CTM-030 (if portable analyzer use is allowed)

~~Attachment 1~~

~~Portable Analyzer Protocol~~

~~Emission readings using a portable analyzer shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced over the 15-consecutive-minute period. If the results of the portable analyzer show that the NOx or CO emissions from the unit exceed the applicable limits, then the unit shall be source tested no later than 60 days from the date of discovering such exceedance.~~

~~Portable Analyzer Specifications~~

~~A. **General:** A portable analyzer consists of a sample interface, a gas detector, and a data recorder, and is used to quantitatively analyze stack gas for one or more components. A portable analyzer for CO, O2, or NOx shall be considered approved by the District if it adheres to the standards that are set forth in this section, is used in accordance with the standards of this section, and is used in accordance with the manufacturer's specifications. Other portable analyzers and techniques are approvable on a case by case basis.~~

~~B. **Definitions:**~~

~~**Sample interface:** That portion of the portable analyzer used for one or more of the following: sample acquisition, sample transport, sample conditioning, or protection of the portable analyzer from the effects of the stack effluent.~~
~~**Gas detector:** That portion of the portable analyzer that senses the gas to be measured and generates an output proportional to the gas concentration.~~
~~**Data recorder:** A strip chart recorder, digital recorder, or any other device used for recording or displaying measurement data from the gas detector output.~~
~~**Resolution:** The smallest increment of output that the gas detector will provide. This value should be reported by the equipment manufacturer.~~
~~**Error:** The maximum standard measurement error over the measurement range. This value should be reported by the equipment manufacturer.~~
~~**Detection Limit:** The lowest concentration of gas that can be detected by the gas detector. This value should be reported by the equipment manufacturer.~~
~~**Response Time:** The amount of time required for the portable analyzer to display 95% of a step change in gas concentration on the data recorder.~~

~~C. **Equipment:** The portable analyzer shall adhere to the standards tabulated below for each of the pollutants that it is intended to measure. All values in the table refer to maximum values. In addition to the parameters contained in the table, the minimum upper limit of the measurement range shall be equal to 1.5 times the emission limit for the species being measured.~~

~~Detector~~	~~Resolution~~	~~Error~~	~~Detection Limit~~	~~Response Time~~
~~CO~~	~~20 ppm~~	~~± 50 ppm~~	~~50 ppm~~	~~1 min~~
~~O2~~	~~0.5%~~	~~± 1.0%~~	~~0%~~	~~1 min~~
~~NOx~~	~~1 ppm~~	~~± 1 ppm~~	~~5 ppm~~	~~1 min~~

~~D. **Calibration:** Each gas detector shall be calibrated a minimum of once every six months and all instrument calibration data shall be kept on file with the monthly analyses. If the manufacturer recommends calibration more than once every six months, then the instrument calibration shall follow the manufacturer's recommended interval. Two calibration gases are required, the upper limit calibration gas shall have a concentration of 60-100% of the upper limit of the measurement range and the lower limit calibration gas shall have a concentration from 0-10% of the upper limit of the measurement range. Ambient air may be used as the upper limit calibration gas for O2 and may be used as the lower limit calibration gas for both~~

~~NOx and CO. The system response time shall be determined during the gas detector calibration. The portable analyzer shall first be purged with ambient air. Calibration gas is then provided to the portable analyzer through a tubing length typically used during analysis. The time necessary for the data recorder to display a concentration equal to 95% of the final steady state concentration shall be recorded as the response time.~~

~~E. **Measurement:**~~

~~1. Concentration measurements shall not be taken until the sample acquisition probe has been exposed to the stack gas for at least 150% of the response time. Measurements shall be taken in triplicate.~~

~~2. If water vapor is not removed prior to measurement, the absolute humidity in the gas stream must be determined so that the gas concentrations may be reported on a dry basis. If water vapor creates an interference with the measurement of any component, then the water vapor must be removed from the gas stream prior to concentration measurements.~~

~~3. The concentration of NOx is calculated as the sum of the volumetric concentrations of both NO and NO2. The portable analyzer used to detect NOx must either convert NO2 to NO and measure NO, convert NO to NO2 and measure NO2, or measure both NO and NO2. An NO2 to NO converter is not necessary if data are presented to demonstrate that the NO2 portion of the exhaust gas is less than 5 percent of the total NOx concentration.~~

REGULATION 1
GENERAL PROVISIONS AND DEFINITIONS

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REGULATION 1
GENERAL PROVISIONS AND DEFINITIONS

(Adopted September 5, 1979)

1-100 GENERAL

1-101 **Description:** The general provisions and definitions included in Regulation 1 shall apply to all other District Rules and Regulations. Definitions which are included in any other District Rule or Regulation are specific to that Rule or Regulation and shall not apply to any other Rule or Regulation.

1-102 **More than One Emission Standard:** Where a person is subject to more than one emission standard for the same air contaminant, the more stringent shall apply.

1-103 **Violations Not Authorized:** Nothing in District Rules or Regulations is intended to permit any practice in violation of any statute, ordinance, Rule or Regulation.

1-104 **Circumvention Not Permitted:** A person shall not undertake or authorize any practice intended or designed to evade or circumvent District Rules or Regulations.

1-105 **Regulations Not Intended to Apply to Workroom Atmosphere:** District Regulations are not intended to apply to the air quality requirements for the workroom atmosphere necessary to protect an employee's health from contaminants emitted by the source; nor are they concerned with the occupational health factors in an employer-employee relationship.

1-106 **Separation of Emissions:** Where air contaminants from a single source are emitted through two or more emission points, the total quantity of air contaminants thus emitted shall not exceed the quantity allowable through a single emission point.

1-107 **Combination of Emissions:** Where air contaminants from two or more sources are combined prior to emission and there are no adequate and reliable means to establish the nature, extent and quantity of emission from each source, District Regulations shall be applied to the combined emission as if it originated in a single source. Such emissions shall be subject to the most stringent limitations and requirements of District Regulations applicable to any of the sources whose air contaminants are so combined.

1-108 **Metric Governs**: When units of weight or measure are expressed in both the international system (SI) of metric units and English units, the metric units are the standard and the English units are approximations to be used for guidance only.

(Amended May 17, 2000)

1-109 **Severability:** If any District Rule or Regulation, or portion thereof, is adjudged by a court of competent jurisdiction to be unconstitutional or otherwise invalid, such judgment shall be limited to that Rule, Regulation or portion thereof, and not otherwise affect or invalidate the remainder of District Rules and Regulations.

1-110 **Exclusions:** District Regulations shall not apply to the following:

110.1 Engines used to propel motor vehicles, and defined by the Vehicle Code of the State of California.

110.2 Deleted May 17, 2000.

110.3 Aircraft.

110.4 Fires from residential cooking.

110.5 Open outdoor fires, other than for the disposal of waste propellants, explosives or pyrotechnics by manufacturing facilities; recreational fires and outdoor cooking fires, except as limited by Regulation 5.

110.6 Any emission point which is not an intended opening and from which no significant quantities of air contaminants are emitted.

110.7 Smoke generators intentionally operated to train observers in appraising the shade of emissions.

110.8 Air contaminants, where purposely emitted for the sole purpose of a specific beneficial use, and where essentially all of the air contaminants are confined to the area in which such beneficial use is obtained. The quantity and nature of the air contaminants, and the proportion of air contaminants used in

relation to amounts of other materials involved in the beneficial use of air contaminants, shall conform to accepted practice in type of use employed.

110.9 Agricultural sources except as provided in:

9.1 Regulation 5: Open Burning; and

9.2 Regulation 2: Permits.

(Renumbered 3/17/82; Amended 12/19/90; 11/3/93; 5/17/00; 5/2/01; 7/19/06; 7/9/08)

1-111 **Deleted, October 7, 1998**

1-112 **Breakdown**: The APCO may refrain from enforcing the provisions of District regulations for excesses of emissions resulting from the breakdown of air pollution abatement equipment or operating equipment provided such emissions do not interfere with the attainment or maintenance of any national or California ambient air quality standard and further provided that the persons responsible for such emissions comply with the administrative requirements of Section 1-431 and 432.

(Amended March 17, 1982)

1-113 **Discretionary Enforcement, Breakdown**: If excessive emissions resulting from the breakdown of air pollution abatement equipment or operating equipment persist until the end of a production run or up to 24 hours, whichever is sooner, a violation of District regulations shall be deemed to have occurred. However, the APCO may elect to take no enforcement action if the person responsible for the emissions shows that appropriate corrective measures have been taken and that emissions are either in compliance or that the equipment has been shut down either before the next production run or within 24 hours, whichever is sooner.

1-114 **Exemption, Uncombined Water**: Where the presence of uncombined water is the only reason for the failure of a visible emission to meet District limitations, those limitations shall not apply. The burden of proof to establish the application of this section shall be upon the person seeking to come within its provisions.

1-115 **Exemption, Modification to Meet Emission Standards:** When permits are necessary for modifying an existing source in order to comply with emission regulations such modifications shall not subject the existing source to emission standards for new or modified plants as set forth in Section 2-2-301 or 2-2-302 or 2-2-303 of Regulation 2, Permits.

(Amended December 17, 1980)

1-116 **Definitions:** Definitions that are specific to a Rule or Regulation shall take precedence over more general definitions.

116.1 A definition contained in a Rule shall apply to that Rule. Lacking such a definition,

116.2 A definition contained in Rule 1 of a regulation shall apply to all Rules of the Regulation. Lacking such a definition,

116.3 A definition contained in Regulation 1 shall apply to all District Regulations.

(Adopted May 17, 2000)

1-200 **DEFINITIONS**

1-201 **Air Contaminant or Air Pollutant:** Any material which, when emitted, causes or tends to cause the degradation of air quality. Such material includes, but is not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids or any combination thereof.

1-202 **Air Pollution Control Equipment:** Any equipment, the operation of which has as its primary purpose a significant reduction in either the emission of air contaminants or the effects of such emissions.

1-203 **APCO:** The Air Pollution Control Officer of the Bay Area Air Quality Management District or the designee thereof.

1-204 **ARB:** The Air Resources Board of the State of California.

1-205 **Atmosphere**: The air that surrounds the earth, excluding the general volume of gases contained within any building or structure if the APCO determines that emissions within such building or structure do not escape to the outside air.

(Amended March 17, 1982)

1-206 **BAR:** 100,000 pascals (100,000 N/m^2).

1-207 **Best Modern Practices**: The minimization of emissions from equipment and operations by the employment of modern maintenance and operating practices used by superior operators of like equipment and which may be reasonably applied under the circumstances.

1-208 **Breakdown (malfunction):** Any unforeseeable failure or malfunction of any air pollution control equipment or operating equipment which causes a violation of any emission standard or limitation prescribed by District, California or federal rules, regulations or laws, where such failure or malfunction:

208.1 Is not the result of intent, neglect, or disregard of any air pollution control law, rule or regulation;

208.2 Is not the result of improper maintenance;

208.3 Does not constitute a nuisance;

208.4 Is not an excessively recurrent breakdown of the same equipment.

1-209 **Commenced**: Where a person has undertaken a continuous program of construction, reconstruction or modification, or a person has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, reconstruction or modification.

1-210 **Construction:** Fabrication, erection or installation of a plant.

1-211 **Discharge:** To permit, let, suffer or allow an emission.

1-212 **District:** The Bay Area Air Quality Management District.

1-213 **Emission or Emissions:** A gas or liquid stream containing one or more air contaminants. The verb form, emit, means the act of discharging an emission into the atmosphere.

1-214 **Emission Point:** The location (place in horizontal plane and vertical elevation) at which an emission enters the atmosphere.

1-215 **Facility:** Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites.

1-216 **Fixed Capital Cost:** The capital needed to provide all the depreciable components of a plant.

1-217 **Modification:** Any physical change in existing plant or change in the method of operation which results or may result in either an increase in emission of any air pollutant subject to District control, or the emission of any such air pollutant not previously emitted. The following shall not be regarded as physical changes or changes in the method of operation:

217.1 Routine maintenance, repair or replacement with identical or equivalent equipment.

217.2 Increased production rate or increased hours of operation where there is no increase in fixed capital cost, unless such production and hours are limited by permit conditions.

1-218 **Opacity:** The decrease in the transmission of light through a gas stream, as indicated by the expression $(1-P/P_o)$ where P_o is the radiant power initially directed at the emission being measured, and P is the radiant power received after passing through the emission.

(Amended May 21, 1980)

1-219 **Operation:** Any physical action resulting in a change in the location, form, or physical properties of a material, or any chemical action resulting in a change of the chemical composition, or chemical or physical properties of a material. The following are given as examples, without limiting the generality of the foregoing: heat transfer, calcination, double decomposition, fermentation, pyrolysis, electrolysis, combustion, material handling, evaporation, mixing, absorption, filtration, screening and fluidization.

219.1 Heat transfer operation means any operation which (a) involves the combustion of fuel for the principal purpose of utilizing the heat of combustion-product gases by the transfer of such heat to the process

material; and (b) does not transfer a significant portion of heat by direct contact between the combustion-product gases and the process material.

219.2 Incineration operation means any operation in which combustion is carried on for the principal purpose, or with the principal result, of oxidizing a liquid or solid waste material to reduce its bulk or facilitate disposal or both of such.

219.3 Salvage operation means any operation in which combustion is carried out for the primary purpose or result of salvaging metals, where the principal metal to be salvaged is not melted. Other metals present in small quantities may be melted.

219.4 General operation means any operation other than those defined in Sections 1-219.1, 219.2 or 219.3.

1-220 **Operating Day:** A 24 hour time period from midnight to midnight.

(Amended May 17, 2000)

1-221 **Person:** Any natural person, corporation, government agency, public officer, association, joint venture, partnership or any combination of such or such entities as are included in Section 39047, California Health and Safety Code.

1-222 **Plant:** The machinery and equipment, including tanks, necessary to carry out an operation.

1-223 **ppmv:** Parts per million by volume.

1-224 **Reconstruction:** Replacement of the components of an existing plant to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable, entirely new plant.

1-225 **Sampling Point:** The location in a Type A emission point where the measurements of flow volume and contaminant concentrations can be made which are representative of the actual flow volume and contaminant concentrations.

1-226 **Sea Level Atmospheric Pressure:** 1.01 bar or 101 kilo pascals (14.7 psia).

1-227 **Source:** Any operation that produces and/or emits air pollutants.

1-228 **Standard Conditions:** A sea level atmospheric pressure and a temperature of 21 degrees Celsius (70 degrees Fahrenheit).

1-229 **Standard Dry Cubic Meter:** One m^3 of gas free of water vapor and at standard conditions.

1-230 **Type A Emission Point:** An emission point, having sufficiently regular geometry so that both flow volume and contaminant concentrations can be measured and where the nature and extent of air contaminants do not change substantially between a sampling point and the emission point.

1-231 **Type B Emission Point:** An emission point other than a type A emission point.

1-232 **Visible Emissions:** Emissions which are visually perceived by an observer. Restrictions on visible emissions in District Regulations are expressed as numbers on the Ringelmann Chart as published by the United States Bureau of Mines. Emissions may not be as dark or darker than the designated number on the Ringelmann Chart, or cannot be of such opacity as to obscure a trained observer's view to an equivalent or greater degree. Where the presence of uncombined water is the only reason for the failure of an emission to meet District limitations, those limitations shall not apply (see Section 1-114).

1-233 **Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.

(Adopted March 17, 1982)

1-234 **Organic Compound, Non-Precursor:** Methylene chloride, 1,1,1, trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115). In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound.

(Adopted 3/17/82; Amended 9/2/98)

1-235 **Organic Compound, Precursor:** Any organic compound as defined in 1-233 excepting the non-precursor organic compounds, 1-234.

(Adopted March 17, 1982)

1-236 **Volatile Organic Compound (VOC):** Any organic compound, as described in Section 1-233, which would be emitted during use, processing, application, curing or drying of a solvent, surface coating, or other material.

(Adopted October 19, 1983)

1-237 **Reduced Sulfur Compounds:** All organic and inorganic sulfide compounds and mercaptans.

(Adopted October 19, 1983)

1-238 **Parametric Monitor:** Any monitoring device or system required by District permit condition or regulation to monitor the operational parameters of either a source or an abatement device. Parametric monitors may record temperature, gauge pressure, flowrate, pH, hydrocarbon breakthrough, or other factors.

(Adopted Sept. 2, 1998)

1-239 **Continuous Emission Monitor:** Any monitoring device or system, required by Regulation 1-520 and 521.

(Adopted September 2, 1998)

1-240 **Abatement Device:** Any equipment or process whose sole purpose is to reduce the amount of one or more pollutants from the source.

(Adopted 10/7/98; Amended 5/17/00)

1-241 **Owner or Operator:** Any person who owns, leases, operates, controls, or supervises a facility, building, structure, installation, or source which directly or indirectly results or may result in emissions of any air pollutant.

(Adopted May 17, 2000)

1-242 **Parametric Emission Monitoring System:** A monitoring system that continuously measures process parameters and uses a computer model to estimate emissions based on the parameters measured. Usually used as an equivalent to, and in lieu of, direct measurement of emissions using a continuous emission monitor.

(Adopted May 17, 2000)

1-300 STANDARDS

1-301 **Public Nuisance:** No person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property. For purposes of this section, three or more violation notices validly issued in a 30 day period to a facility for public nuisance shall give rise to a rebuttable presumption that the violations resulted from negligent conduct.

(Adopted 3/17/81; Amended 5/2/90)

1-400 ADMINISTRATIVE REQUIREMENTS

1-401 **Violation Notice:** A notice of violation or citation shall be issued by the District for all violations of District regulations and shall be delivered to persons alleged to be in violation of District regulations. The notice shall identify the nature of the violation, the rule or regulation violated, and the date or dates on which said violation occurred.

1-402 **Status of Violation Notices During Variance Proceedings:** Except as provided below, where a person has applied for a variance, no notices shall be issued during the period between the date of filing for the variance application and the date of decision by the Hearing Board for violations covered by the variance application. However, during the period between the date of the filing for a variance and the date of the decision by the Hearing Board, evidence of additional violations shall be collected and duly recorded. Where the variance is denied, evidence of violations collected between the filing date and decision date shall be reviewed and a notice of violation issued for violations occurring during that period shall be served upon said person. Where the variance is granted, no notice of violation shall be issued for violations occurring during that period except in extraordinary circumstances as determined by the APCO.

402.1 Notwithstanding the foregoing, when the Hearing Board's proceedings on a variance application will require more than one day of hearing time, any party to the proceeding may request, or the Hearing Board on its own motion may require, that the provisions of this Section 1-402 shall not apply to any violations occurring during the course of the variance proceeding unless and until the applicant has satisfied the good cause standard for the granting of an interim variance, as provided in Health and Safety Code Section 42351. In the event that a variance is eventually granted in such a case, the Air Pollution Control Officer may rescind any notices of violation issued during the course of the variance proceeding.

(Adopted October 21, 1992)

1-410 **Registration:** A person who is required by any District rule or regulation to register equipment shall register with the District and shall thereafter provide on an annual basis any information requested by the APCO regarding emissions from such equipment. Equipment requiring a District permit to operate is exempt from registration.~~A person responsible for the emission of air contaminants shall register with the District on forms provided by the APCO, and shall thereafter provide any information requested by the APCO regarding such emissions to the District on an annual basis. Plants or facilities requiring annual operating permits are exempt from registration.~~

1-411 **Permits May Be Needed:** Registration with the District shall not relieve a person from the requirements of Regulation 2, Permits, where applicable.

1-412 **Owner and Address of Record~~Address For Service~~:** The owner and address of record of a facility for which the District has issued a permit to operate or registration shall be the owner and facility street address listed on the permit to operate or registration unless otherwise designated in writing by the owner on District-approved forms.

412.1 The owner of record shall notify the District in writing within 30 days of any change to the owner or address of record.

412.2 A facility's owner and address of record shall serve as the facility's contact person and place of contact for all official correspondence from the District, including notices, compliance advisories, service of process, registrations, and permits to operate.

~~A person registered with the District may be served notices, including notices of hearings before the Hearing Board, by certified mail addressed to the address contained in the registration form on file with the District.~~

1-420 **Emission Source Data:** Upon the request of the APCO, a person responsible for the emission of air contaminants shall provide the District with any data concerning emissions from any operation under such person's control. The data shall be in such form as prescribed by the APCO, who may require that such data be certified by a registered professional engineer.

1-430 **Breakdown Procedures:** The APCO shall establish written procedures to insure that all reported breakdown occurrences are handled uniformly to final disposition.

1-431 **Breakdown Report:** A person seeking relief pursuant to Section 1-112 shall notify the APCO of the breakdown condition immediately, with due regard for public safety, including the hazard of fire and explosion. Such notification shall include the time, specific location, equipment involved and to the extent possible the cause of the breakdown.

1-432 **Written Breakdown Report:** Within 30 days of the occurrence of a breakdown, the person responsible shall submit a written report to the APCO including the following:

432.1 Sufficient information to enable the APCO to determine whether or not a breakdown occurred and the cause of the breakdown;

432.2 A summary of the corrective action taken following the breakdown;

432.3 Present status of the breakdown, and

432.4 A summary of actions taken to insure that such breakdowns will not occur in the future.

1-433 **Determination of Breakdown:** Following the report made pursuant to Section 1-431, the APCO shall promptly investigate to determine whether the occurrence

reported constitutes a breakdown. The determination may be made based upon information developed by the investigation, or upon the basis of such information in addition to information reported in the written report made pursuant to Section 1-432. If the APCO determines that the occurrence does not constitute a breakdown, appropriate enforcement action may be taken.

1-434 **Administrative Violation, Breakdown:** Any person who knowingly files falsely, or without probable cause, a claim for relief pursuant to Section 1-112 shall be presumed to be in violation of these regulations. The burden of proof of establishing that a breakdown has occurred shall be upon the person who requests the breakdown relief.

1-440 **Right of Access to Premises:** The person responsible for emissions shall provide to the APCO reasonable access to any facility or equipment therein which is subject to the permit requirements of the District and which may cause or control or record such emissions for the purpose of investigating compliance with District regulations or California law. Such access shall be granted with due consideration for the safety of District employees and minimum interference with the operations of the facility.

1-441 **Right of Access to Information:** The APCO may request in writing from a person responsible for emissions from any source: plans, specifications, records, samples or other information which will disclose the nature, extent, quantity or degree of air contaminants which are or may be emitted by the source. Such information may include, but is not limited to, process charts, in-stack monitoring data and operating logs which relate to emissions. If the person feels that trade secrets are unreasonably being requested by the APCO, the person may appeal directly to the Board of Directors.

441.1 When copies of monitoring charts are requested, the APCO may require that such charts immediately be properly identified and labeled in the presence of a District representative.

441.2 When samples relating to emissions are requested, the APCO may require that such samples be obtained in the presence of a District representative.

441.3 Information requested by the APCO shall be provided as soon as reasonable possible, but in any event within 30 days from the date of receipt of the request.

1-500 MONITORING AND RECORDS

1-501 **Sampling Facilities:** A person responsible for the emission of air contaminants for which emission limits have been established by these regulations shall, upon the request of the APCO, provide such sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for the determination of the nature and quantity of such air contaminants.

1-502 **Sampling at Type B Emission Points:** Emissions from a Type B emission point shall be measured at the place and by procedures which show the highest measurement of air contaminants.

1-510 **Area Monitoring:** Persons subject to or seeking to come within the provisions of the area monitoring requirements of these regulations shall install, calibrate, operate, site and maintain all monitoring equipment in order to monitor continuously the concentration of the specified air pollutant. Such persons shall install suitable instruments, and meteorological stations to monitor continuously and record weather conditions if required by the APCO or the terms of the regulations.

1-520 **Continuous Emission Monitoring:** Persons responsible for the emissions from the following sources shall install monitors for the following air pollutants or analog thereof:

520.1 NOx, CO_2, or O_2, from steam generators with a rated heat input of 264 GJ's (250 million BTU) or more per hour; and opacity from steam generators with a rated heat input of 264 GJ's (250 million BTU) or more per hour which are permitted for discretionary combustion of a non-gaseous fuel. Firing of non-gaseous fuel permitted under the "test-firing" provisions of District rules is not considered to be "discretionary."

520.2 NOx from all new nitric acid plants, and existing plants having a production capacity in excess of 272 metric tons (300 T) per days as 100% nitric acid.

520.3 SO_2 from sulfuric acid plants.

520.4 SO_2 from sulfur recovery plants emitting more than 45 KG (100 lbs.) per day of SO_2.

520.5 SO_2 and opacity from the catalyst regenerators of fluid catalytic crackers.

520.6 SO_2 and opacity from fluid cokers with a fresh feed rate greater than 1600 m^3 (10,000 bbls) per day.

520.7 SO_2 from fossil fuel fired steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour with a use factor of at least 30% and utilizing flue gas desulfurizing units, and

520.8 Monitors as required by Regulations 10, 12 and Section 2-1-403 of Regulation 2.

(Amended 3/17/82; 10/7/98)

1-521 **Monitoring May Be Required:** The APCO may require the installation of suitable instruments to monitor continuously the nature, quantity and opacity of any air pollutant controlled by District regulations where there is a reason to believe such emissions are in potential violation of such regulations.

1-522 **Continuous Emission Monitoring and Recordkeeping Procedures:** Persons responsible for installing continuous emission monitors pursuant to District regulations shall comply with the following:

522.1 Plans and specifications for monitoring selection and placement shall be submitted to the APCO for prior approval.

522.2 Installation scheduling shall be completed as specified in Volume V, Manual of Procedures (MOP).

522.3 Continuous emission monitors and their components shall be performance tested as specified in Volume V, MOP.

522.4 Continuous emission monitor periods of inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Adequate proof of expeditious repair shall be furnished to the APCO for downtime in excess of fifteen consecutive days.

522.5 Monitors shall be calibrated daily except for velocity sensing instruments which shall be calibrated monthly.

522.6 Continuous emission monitors and their components shall be maintained to be accurate to within twenty percent when compared to the field accuracy test procedures of Volume V, MOP, or 10% of the applicable emission standard, or 5% of span in the absence of an emission standard.

522.7 Any indicated excess of any emission standard to which the source is required to conform, as indicated by the monitor, shall be reported to the APCO within 96 hours after such occurrence. The report shall include the nature, extent, and cause.

522.8 Monitoring data shall be submitted on a monthly basis in a format specified by the APCO. Reports shall be submitted within 30 days of the close of the month reported on.

522.9 Records shall be maintained for a period of at least two years and shall be made available to the APCO on request. They shall include:

1) Occurrence and duration of any startup, shutdown or malfunction.
2) Tests, calibrations, adjustments and maintenance.
3) Emission measurements.

522.10 Monitors required by Sections 1-521 or 2-1-403 shall meet the requirements specified by the APCO.

(Adopted 3/17/82; Amended 9/2/98; 11/15/00)

1-523 **Parametric Monitoring and Recordkeeping Procedures:** Persons responsible for installing parametric monitors pursuant to District permit conditions or regulations shall comply with the following:

523.1 Parametric monitor periods of inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring to the Compliance and Enforcement Division.

523.2 Parametric monitor periods of inoperation shall not exceed 15 consecutive days per incident or 30 calendar days per consecutive 12-month period.

523.3 Any violation of permit conditions or District regulations to which the source is required to conform, as indicated by the monitor, shall be reported to the APCO within 96 hours after such occurrence. The report shall include the nature, extent, and cause.

523.4 Records shall be maintained for a period of at least two years and shall be made available to the APCO on request. They shall include:

1) Dates and duration of monitoring system periods of inoperation.
2) Tests, calibrations, adjustments and maintenance.

523.5 The person responsible for emissions being monitored shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications and the District Manual of Procedures. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure.

(Adopted 9/2/98; Amended 5/17/00; 11/15/00)

1-530 **Area Monitoring Downtime:** Area monitoring downtime caused by instrument malfunction, where such downtime exceeds a continuous 24-hour period, shall be reported to the APCO within the next normal working day after discovery of the malfunction. Downtime due to maintenance or repair which is expected to exceed 5 days' duration shall be reported to the APCO prior to the commencement of such maintenance or repairs.

(Amended March 17, 1982)

1-540 **Area Monitoring Data Examination:** At intervals of no greater than seven days, data recorded by the instruments required pursuant to Section 1-510 shall be examined by the persons responsible for the instruments to determine compliance with District Regulations.

(Amended March 17, 1982)

1-542 **Area Concentration Excesses:** Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Section 1-510 shall be reported to the APCO within the next normal working day following the examination of data made pursuant to Section 1-540.

1-543 **Record Maintenance for Two Years:** Monitoring records of the equipment required by Section 1-510 shall be kept for a period of two years and shall be made available to the APCO upon request.

(Amended March 17, 1982)

1-544 **Monthly Summary:** The person responsible for emissions being monitored pursuant to Section 1-510 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures.

(Amended March 17, 1982)

1-545 **Deleted November 15, 2000**

1-600 **MANUAL OF PROCEDURES**

1-600 **Manual of Procedures:** As part of these regulations there shall be established and periodically updated a Manual of Procedures. The Manual of Procedures shall include laboratory techniques, source test procedures, instrument specifications, monitoring requirements, enforcement procedures and other relevant information to determine the basis for enforcement action by the District. References to the Manual of Procedures is to the version adopted by the Board of Directors of the Bay Area Air Quality Management District.

(Amended 12/18/85, 1/8/86, 12/2/87, 11/3/93, 9/2/98)

1-601 **Approval of Sampling Facilities:** The criteria by which the APCO shall determine the acceptability of sampling facilities are set forth in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District.

(Amended 1/8/86; 12/2/87; 9/2/98)

1-602 **Area and Continuous Emission Monitoring Requirements:** The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District.

(Amended 1/8/86; 12/2/87; 9/2/98)

1-603 **Visible Emissions:** Procedures for reading of visible emissions by an observer are contained in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District.

(Amended 1/8/86; 12/2/87; 9/2/98)

1-604 **Opacity Measurements:** Specifications and calibration procedures for instruments to be used to measure P and P_0 are to be found in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District.

(Amended 1/8/86; 12/2/87; 9/2/98)

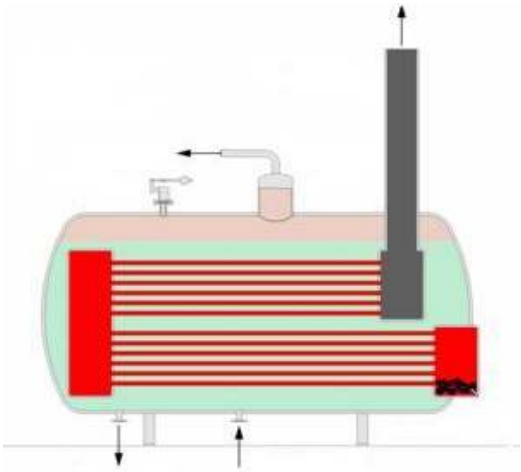
1-605 **Laboratory, Source Test and Air Monitoring Procedures:** The procedures for laboratory, source test and air monitoring analysis are detailed in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District.

(Amended 1/8/86; 12/2/87; 1/18/89; 4/19/89; 9/2/98)

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

BAAQMD Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters and

Regulation 1: General Provisions and Definitions



Addendum to Staff Report
April 2011

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APPENDIX B – 2008 CEQA Negative Declaration and 2011 Addendum

I. EXECUTIVE SUMMARY

On July 30, 2008, the Board of Directors of the Bay Area Air Quality Management District (the "Air District" or "District") adopted amendments to District *Regulation 9: Inorganic Gaseous Pollutants, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters* ("the 2008 amendments") and an Initial Study / Negative Declaration concerning the Amendments ("the Negative Declaration") pursuant to the California Environmental Quality Act (CEQA). The intent of these amendments was to reduce the emissions of nitrogen oxides (NOx) in the District by requiring use of existing and generally available low-NOx technology in new, replacement and existing boilers, steam generators and process heaters ("heaters"). This addendum to the staff report for the 2008 amendments (*Reference 1*) describes proposed changes to the 2008 amendments necessary to give full effect to the Air District's intent in adopting these amendments.

The 2008 amendments:

1. Reduced the NOx emission limits for gas-fired devices rated 10 million BTU/hr (MM BTU/hr) and higher that were already subject to this rule; as well as for devices using other fuels rated 1 to 10 MM BTU/hr and higher that were already subject to this rule;
2. Expanded the rule applicability for natural gas and LPG-fired devices so that it applies to devices rated >2 to <10 MM BTU/hr, and established NOx and CO emission limits for these devices;
3. Established insulation requirements, stack gas temperature limits and tune-up requirements for devices subject to the rule;
4. Established a new, low-fuel exemption criteria for most of the new rule requirements;
5. Established an emissions certification requirement for manufacturers of new, natural gas and LPG-fired devices rated >2 to <10 MM BTU/hr, and also established operator registration requirements (including fees in Regulation 3) for new and existing, natural gas-fired devices in this size range; and
6. Required compliance dates of January 1, 2011 and January 1, 2012 for heaters in the >2 to 5 MM BTU/hr and >5 to <10 MM BTU/hr size range, respectively, and allowed up to 10 years of useful life for heaters that were less than 10 years old.

Some heaters that are subject to Regulation 9, Rule 7 ("Regulation 9-7"), namely heaters that are fired with natural gas or liquefied petroleum gas (LPG) and that are rated >2 to <10 MM BTU/hr, are exempt from District permit requirements. When the 2008 amendments expanded Regulation 9-7 applicability to these devices, the District could have required that these devices be subject to permit requirements in order to provide a mechanism for enforcing Regulation 9-7 requirements. A permit requirement provides the District an opportunity to review a proposed heater prior to installation to ensure that it complies with all applicable requirements. However, a permit process would require that the applicant generally understand District permitting regulations and also have an understanding of Regulation 9-7 requirements. Most operators of small,

natural gas-fired heaters do not operate any other devices subject to District regulation and therefore have a very limited understanding of District regulations. On the other hand, manufacturers and distributors of small boilers tend to be technically sophisticated and also are familiar with air quality regulations. These manufacturers and distributors sell throughout California, including areas where lower NOx standards are already in effect. Therefore, instead of making these small heaters subject to permit requirements, the 2008 amendments required that operators of such devices identify themselves to the District through an on-line registration process (to allow future inspection) and also required that manufacturers of these devices certify them for compliance with the new requirements before offering them for sale. This registration and certification approach partially shifted the burden of understanding and complying with Regulation 9-7 requirements from the operators to the manufacturers.

By the January 1, 2011 deadline, no heater manufacturer had certified any heater model for compliance with Regulation 9-7, so no heaters fired with natural gas or LPG that are rated >2 to <10 MM BTU/hr are lawfully available for sale in the District. To address this problem, the District is now proposing to extend the emissions requirement compliance dates and the certification dates until January 1, 2013. Also, in order to facilitate certification, the District is proposing to expand the methods available for certification. Finally, the District is taking this opportunity to make a number of minor corrections and clarifications to the rule. These proposed changes do not alter the conclusions drawn in the staff report to the 2008 amendments.

II. BACKGROUND

The Intent of the 2008 Amendments

In adopting the 2008 amendments to Regulation 9, Rule 7 ("Regulation 9-7"), the Air District intended to reduce emissions of nitrogen oxides (NOx) from boilers, steam generators and process heaters ("heaters"), while taking due consideration of the cost effectiveness of the required controls and the existence of technology to implement the reductions. The 2008 amendments updated the NOx emissions requirements for heaters rated 10 million BTU/hr (MM BTU/hr) and higher. The 2008 amendments also included new NOx emissions requirements for natural gas and LPG-fired heaters rated greater than 2 to less than 10 MM BTU/hr, and for heaters using any other fuels and rated 1 MM BTU/hr to less than 10 MM BTU/hr. The 2008 amendments also included new energy efficiency requirements (expanded inspection and tune-up requirements, insulation requirements and limits on stack-gas temperature) applicable to all heaters. The intent of these energy efficiency measures was to reduce greenhouse gas (GHG) emissions by limiting heat losses and requiring efficient operation, and to mitigate the possibility of increased GHG emissions caused by reduced overall efficiency as a result of implementing NOx controls.

Regulation 9-7 is a "retrofit" rule that applies emissions requirements to both new and existing devices that are subject to the regulation. Regulation 9-7 is also a "point of sale" rule with regard to heaters that are subject to the rule, but not subject to permit requirements, namely natural gas and LPG-fired heaters rated >2 to <10 MM BTU/hr. For this latter category of heaters, the rule prohibits commerce in devices that have not been certified by their manufacturer to meet the applicable NOx and CO emissions requirements in the regulation.

Prior to the 2008 amendments, Regulation 9-7 generally applied to natural gas and LPG-fired heaters rated 10 MM BTU/hr and higher, and also to heaters rated 1 MM BTU/hr and higher if they used a fuel other than natural gas or LPG. The 2008 amendments extended Regulation 9-7 to generally apply to heaters rated >2 MM BTU/hr, although heaters rated 1 MM BTU/hr and higher that use a fuel other than natural gas or LPG were already subject to the rule. Regulation 9-7 complements Regulation 9-6, which applies to natural gas-fired heaters rated up to and including 2 MM BTU/hr.

Developments Subsequent to Adoption of the 2008 Amendments

Although the requirement that only heaters fired with natural gas or LPG and rated >2 to 5 MM BTU/hr that were certified to meet the emissions requirements may be sold in the District went into effect on January 1, 2011, no manufacturer has applied to certify a heater model in this size range. For devices rated >5 to <10 MM BTU/hr, the certification requirement will go into effect on January 1, 2012. The District has engaged in an extensive outreach program to ensure that manufacturers and their distributors are aware of the certification requirement. Specifically, the District has prepared and widely distributed a Compliance Advisory for manufacturers that explains

the certification requirement. Also, every boiler distributor and manufacturer operating in the Bay Area individually received a copy of the proposed rule amendments and was encouraged to provide comments.

III. PROPOSED RULE AMENDMENTS

Extend Emission Compliance Dates for Small Devices to January 1, 2013

The effective dates for the 2008 NOx and CO standards are included in a table in Section 9-7-308. The effective dates for heaters rated >2 to 5 MM BTU/hr (subject to Section 9-7-307.1) and rated >5 to <10 MM BTU/hr (subject to Section 9-7-307.2) are proposed to change from January 1, 2011 and January 1, 2012, respectively, to January 1, 2013 for both categories. The effective dates for devices rated 1 to <10 MM BTU/hr that use a non-gaseous fuel, exclusively or in combination with another fuel (subject to Section 9-7-307.8 and 307.9), are also proposed to change from January 1, 2011 to January 1, 2013.

Also, Section 9-7-307.7 had a typographical error in the 2008 amendments. Heaters using landfill and digester gases subject to this section should have been described as having a size range of 1 MM BTU/hr or more, rather than 10 MM BTU/hr or more. This error has been corrected and the subcategory of these landfill and digester gas-fired devices rated 1 to <10 MM BTU/hr is also proposed to have an effective date of January 1, 2013.

The special provisions extending compliance dates for devices manufactured less than 10 years before the 2008 effective dates will remain unchanged, although they now appear in new sections 9-7-308.1, 308.2 and 308.3. Also, the special provisions extending compliance dates for facilities with more than one device subject to the 2008 NOx standards will remain unchanged.

Simplify Certification Process, Allow Additional Certification Methods, Add Explicit Effective Date

Section 9-7-406 includes a detailed description of the required certification application for manufacturers of heaters that are fired with natural gas or LPG and that are rated >2 to <10 MM BTU/hr. Staff proposes to simplify this process by amending it to state that the primary requirement for certification is a demonstration of compliance with the applicable NOx and CO limits for these devices, and replacing the detailed application description with a requirement that applicants use a form to be provided by the District. This proposed amendment will simplify the application process by replacing individual applications with a standardized application. Also, a new test method section for certification is proposed in Section 9-7-606. Whereas the 2008 amendments only allowed certification to be demonstrated with BAAQMD source test methods, thus requiring that a new test be conducted for each heater model, the proposed section also allows the use of CARB and US EPA test methods. This change may allow applicants to submit existing test data to satisfy the certification demonstration.

The certification process in Section 9-7-406 is related to the prohibition of commerce in uncertified devices in Section 9-7-310. In the 2008 Amendments, Section 310 did not have an explicit effective date, but applied to devices on the same dates that they were subject to the new NOx limits in Sections 9-7-307.1 and 9-7-307.2 (i.e., January 1, 2011 and January 1, 2012, respectively). However, these compliance dates are not absolute because the 2008 Amendments include a number of provisions that may make specific heaters subject to these sections on a later date based on manufacture date and on the applicability of a low-fuel-use exemption. Therefore, for clarity, Section 310 has been amended to explicitly cite a certification effective date of January 1, 2012.

Other Amendments

In 2009, the Air-Conditioning, Heating and Refrigeration Institute (AHRI) introduced a new efficiency certification program that will replace a number of existing third-party certification programs by January 1, 2012. This consolidated AHRI certification provides a convenient energy efficiency verification tool as an alternative to the stack-gas temperature limits in Section 9-7-312. The temperature limits in Section 312 were adopted in the 2008 amendments to Regulation 9-7. The stack gas temperature limits are a means of verifying the thermal efficiency of a heater, minimizing GHG emissions. Staff proposes to allow AHRI certification of a thermal efficiency of 80% or higher as an equivalent alternative to these temperature limits.

The 2008 amendments included an exemption for devices that were only used for 10% or less of their maximum utility. Exempt devices are not subject to the 2008 NOx or CO limits or efficiency requirements. Section 9-7-309 included three compliance options for these exempt devices. One of these options - operation of the device at a stack gas oxygen concentration of no more than 3% by volume – has proven to be difficult to enforce. Therefore, staff proposes to eliminate this option. The remaining options are: 1) complying with the 2008 NOx and CO limits and efficiency requirements, and 2) performing an annual inspection and tune-up. The tune-up balances fuel and air (oxygen) to ensure efficient combustion, accomplishing the same thing as the stack gas oxygen concentration.

Staff proposes to amend Regulation 1, Section 410 ("Regulation 1-410") to reflect current District practice with regard to equipment registration programs. Regulation 1-410 requires that persons responsible for air emissions register with the District. This section exempts "plants or facilities requiring annual operating permits" from this registration requirement. In practice, the District permits individual sources rather than plants or facilities. Therefore, staff proposes to amend this section to clarify that equipment subject to permit requirements are exempt from registration.

Regulation 1-412 includes administrative requirements regarding the owner and address of record for a permit or registration. Staff proposes to amend this section to require advance notice for changes to the owner or address of record to ensure that the District has current information for addressing official correspondence.

IV. EMISSIONS AND EMISSION REDUCTIONS

Emissions Subject to Control

The staff report for the 2008 amendments estimated NOx emissions of 4.28 ton/day for devices >2 to <10 MM BTU/hr that would be regulated by Regulation 9-7 as a result of the 2008 amendments. Staff has not found any data or information to suggest that this estimate should be revised.

Emission Reductions Expected

The staff report for the 2008 amendments estimated NOx emission reductions of 2.87 ton/day for devices >2 to <10 MM BTU/hr that would be regulated by Regulation 9-7 as a result of the 2008 amendments. Staff has not found any data or information to suggest that this estimate should be revised.

V. ECONOMIC IMPACTS

Compliance Costs

The estimated cost-effectiveness in the staff report for the 2008 amendments was $17,200/ton of NOx reductions for devices rated >2 to 5 MM BTU/hr and $17,400/ton for devices rated 5 to <10 MM BTU/hr. A compliance audit has verified that the estimated costs to comply with the 2008 amendments used worst-case assumptions (replacement of all small boilers). The audit has found that, in many cases, retrofit technology is available for many small boilers, reducing the cost of compliance. Therefore, the actual compliance costs do not exceed the estimates in the 2008 staff report.

Socioeconomic Impacts

Section 40728.5 of the California Health and Safety Code requires an air district to assess the socioeconomic impacts of the adoption, amendment or repeal of a rule if the rule is one that "will significantly affect air quality or emissions limitations." Applied Development Economics of Walnut Creek, California prepared a socioeconomic analysis of the 2008 amendments to Regulation 9, Rule 7. The analysis concluded that the affected facilities and individuals should be able to absorb the costs of compliance with the proposed rule when water heaters or small boilers require replacement without significant economic dislocation or loss of jobs. Applied Development Economics has analyzed potential impacts from the proposed compliance date extension and concluded that there would be no new cost above and beyond the costs associated with the 2008 amendments. A copy of the 2008 socioeconomic analysis and the 2011 addendum to the analysis is attached as Appendix A.

VI. ENVIRONMENTAL IMPACTS

The Negative Declaration for the 2008 amendments

Pursuant to the California Environmental Quality Act, the Air District contracted with Environmental Audit, Inc., to prepare an initial study for the 2008 amendments. The initial study concluded that there are no potential significant adverse environmental impacts associated with the 2008 amendments. The initial study and negative declaration was circulated for public comments. No comments were received. The Board of Directors of the Air District approved the Negative Declaration for the 2008 amendments on July 30, 2008. The Negative Declaration concluded that the 2008 amendments would result in no significant adverse impacts and that the amendments would benefit the Bay Area by causing a reduction in emissions of NOx and particulate matter.

Air District staff has developed an addendum to the Negative Declaration (the "Addendum"). The Addendum discusses the changes to the 2008 amendments proposed in the current rulemaking and their effect on the analysis in the Negative Declaration. The Addendum concludes that none of the proposed changes significantly affects any of the analyses or conclusions of the Negative Declaration adopted by the BAAQMD Board of Directors for the 2008 amendments. A copy of the 2008 Negative Declaration and 2011 Addendum is attached as Appendix B. These documents were also circulated for public comment during the period from April 4, 2011 to April 18, 2011. No comments were received on these documents.

VII. REGULATORY IMPACTS

Section 40727.2 of the Health and Safety Code requires an air district, in adopting, amending, or repealing an air district regulation, to identify existing federal and district air pollution control requirements for the equipment or source type affected by the proposed change in air district rules. The air district must then note any difference between these existing requirements and the requirements imposed by the proposed change. The proposed amendments do not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements.

VIII. RULE DEVELOPMENT PROCESS

Since the adoption of the 2008 amendments, District staff has participated in a number of workshops, training sessions and other forums to explain new requirements of Regulation 9-7. District staff has participated in several multi-day workshops sponsored by a heater distributor (R F MacDonald), attended by hundreds of boiler operators. Staff has also participated in two web conferences sponsored by PG&E contractor Enovity with dozens of participants, and has made presentations to facility managers with the City of San Francisco and the City of Palo Alto. District staff has also made a

presentation to a local chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

More recently, staff has undertaken an extensive inspection and outreach program to evaluate compliance with rule requirements and to ensure that these requirements are understood by operators and manufacturers. In conjunction with these inspections, staff has mailed compliance advisories to over 3000 heater operators, manufacturers, industry groups and other stakeholders.

District staff posted a draft rule for public comment on the District website on March 17, 2011. This draft rule was also mailed to the 3000 heater operators, manufacturers, industry groups and other stakeholders. Twelve comment letters were received. Five letters were from heater operators, six were from heater manufacturers or distributors and one was from a consultant. Comments were received from:

- Veterans Affairs Medical Center, San Francisco (heater operator)
- RKDM Enviro-Energy Services (burner distributor)
- Bryan Steam (heater manufacturer)
- Agilent Technologies, Santa Rosa (heater operator)
- Parker Boiler (heater manufacturer)
- Genentech, South San Francisco (heater operator)
- Lawrence Livermore National Laboratory, Livermore (heater operator)
- Alzeta Corporation, Santa Clara (burner manufacturer)
- Power Boiler Sales, Richmond (heater distributor)
- NRG Energy Center, San Francisco (heater operator)
- California Hydronics Corporation, Hayward (heater distributor)
- Smith Aldridge (environmental consultant)

Comments from <u>heater operators</u> are summarized here:

1. A comment supported the proposed compliance time extension for some heaters.
2. A comment requested that the compliance date for devices rated 10 MM BTU/hr and larger also be extended. The reason for the request was the possibility that this operator would choose to replace a device rated more than 10 MM BTU/hr (and required to comply on 1/1/2012) with a device smaller than 10 MM BTU/hr. New devices smaller than 10 MM BTU/hr are required to be certified beginning on 1/1/2012, so it is possible that a certified replacement would not be available until 1/1/2012 which would make it difficult or impossible to procure a replacement for the larger heater by the 1/1/2012 date on which this larger heater must comply. District staff has provided a compliance option for this situation in the final proposal by allowing devices rated less than 10 MM BTU/hr to be installed through the permit process instead of the certification process. This option is in Section 9-7-310.

3. A comment requested that the rule allow a heater that is subject to the new NOx limits to become exempt from these limits if the heater fuel usage drops enough that it meets the "low fuel use" criteria in the exemption in Section 112. Although the proposed amendments include a clarification that heaters subject to NOx limits may not thereafter become exempt from these requirements, this has always been the intent of the rule because if a heater complies with a NOx limit, it can and should continue to do so. This suggestion was not incorporated.
4. A comment requested clarification that piping below grade should not be subject to insulation requirements. "Below grade" means beneath the ground level, including heaters in basements and other "below grade" open spaces. The insulation requirements only apply to exposed piping, so inaccessible or buried piping is not subject to the requirements.
5. Two comments suggested that there is an apparent contradiction in that Section 9-7-403 requires an initial demonstration of compliance for heaters rated less than 10 MM BTU/hr, but later exempts heaters that are subject to certification. Certification applies to new devices fired with natural gas or LPG that are rated less than 10 MM BTU/hr. These provisions are not contradictory because only new devices are subject to certification, and it is appropriate to exempt these from an initial demonstration of compliance. However, many existing heaters that were installed before 1/1/2012 were not certified, so it is appropriate for these devices to do an initial demonstration of compliance with the new standards. One of the comments suggested editorial changes to the sections regarding monitoring and records and citations to test procedures in the District Manual of Procedures. These changes were not necessary except for one identified typographical error.
6. A comment requested some administrative changes to the registration process related to small boilers subject to this rule. The final proposal was not amended in response to this comment because this comment is not related to the rule itself, but to an administrative process to implement the rule requirements. The comment will be considered in the registration process.
7. Two comments suggested that the periodic testing requirements in Section 506 and the heater tune-up requirements in Section 313 are an unnecessary burden. Section 506 requires annual measurement of NOx and CO emissions to periodically verify compliance with applicable emission limits and allows a hand-held analyzer to be used for these measurements as a lower-cost alternative to a source test. The tune-up requirement in Section 313 was deleted in the final proposal. Tune-ups continue to be a compliance option for "low fuel use" heaters that are not subject to a NOx standard.
8. A comment requested clarification of the boiler tune-up procedure in the Manual of Procedures, Volume I, Chapter 5. This comment addresses an issue unrelated to the proposed changes. It will be addressed separately.
9. A comment requested that a device-specific test be an acceptable substitute for the Air-Conditioning, Heating and Refrigeration Institute (AHRI) efficiency certification

cited in Section 312. The comment did not suggest a specific test protocol. Although the District may allow a variety of test methods, these methods must be approved by U.S. EPA. An unspecified method does not meet this criterion.

10. A comment requested that the term "ambient air" be replaced by "combustion air" in the table in Section 312 that describes the basis for determining acceptable stack gas temperatures. Staff has incorporated this change.

11. A comment requested that technology certified by U.S. EPA's "Environmental Technology Verification" program generally be allowed for compliance verification purposes in the rule. District staff consulted with U.S. EPA technical staff and were advised that a general reference to this program would not be acceptable. Staff can further consider this comment as EPA's program is more fully developed.

12. A comment took issue with a proposed clarification that heaters that were exempt from the new NOx limits because of low fuel use could not be counted as compliant devices for the purposes of determining whether a facility with multiple heaters was complying with the phased-in compliance schedule in Section 308. Section 308 allows facilities with multiple heaters to comply over several years. The operator making this comment had assumed that exempt devices could be counted as contributing towards overall compliance. District staff believes that this is a reasonable interpretation and has incorporated a clarification consistent with this interpretation into the final proposal.

Comments from <u>heater manufacturers and distributors</u> are summarized here:

1. One comment noted that the stack gas temperature limits in Section 312 might discourage the use of a specific burner design used in atmospheric boilers (that do not use a fan to exhaust gases), even though the burner achieves the level of efficiency that Section 312 is intended to ensure. The temperature limits, which ensure reasonable efficiency thereby reducing fuel use and greenhouse gas emissions, were adopted in the 2008 amendments to Regulation 9-7. The proposal includes, as an alternative to the Section 312 temperature limits, an allowance for heaters to be certified to have a minimum combustion efficiency as certified by the Air-Conditioning, Heating and Refrigeration Institute (AHRI). AHRI certification is based on efficiency test methods that conform to federal Department of Energy standards. The ability to use AHRI certification satisfies this concern. District staff will continue to evaluate the implementation of this regulation to ensure that it does not put complying burner technologies at a disadvantage. The final proposal was not amended in response to this comment.

2. Two comments generally criticized the use of a certification requirement in this rule as a mechanism for enforcing the new NOx limits. The certification program was previously adopted in the 2008 amendments to Regulation 9-7. The comments suggested logistical problems for manufacturers and distributors that would be created by this system. District staff carefully considered various options for implementing and enforcing the new NOx limits in this rule. Although the certification program does create new requirements for manufacturers and

distributors, the District attempted to mitigate this burden by not imposing a certification fee, by allowing a number of acceptable certification methods to allow the use of existing certification data, and also added the option for an operator to obtain a permit rather than using the certification program. When these mitigating factors are considered, District staff believes that certification represents, overall, the most efficient way to implement the new NOx standards, particularly for previously unregulated, small heater operators. In addition, a similar certification program has already been successfully implemented in the South Coast AQMD for small heaters. The final proposal was not amended in response to these comments.

3. Two comments noted that it was possible that, in attempting to satisfy the stack gas temperature limits in Section 312, a heater operator might install an economizer on the heater exhaust, and that this would affect exhaust gas characteristics such that exhaust gases were not completely removed from a building. The temperature limits in Section 312 were adopted in the 2008 amendments to Regulation 9-7. Under some circumstances, a reduction of stack gas temperatures could create an unsafe situation because cooler exhaust gases would not rise through a tall stack as efficiently as hotter gases. This possibility is a general concern whenever exhaust temperatures are reduced. Good industrial practice dictates that the compatibility of existing infrastructure, including flues and exhaust stacks, be considered whenever a device such as a boiler or water heater is installed or modified. The potential problem identified in these comments would be avoided through adherence to building and safety codes. District staff has found through its outreach efforts that distributors, installers and service providers are aware of these considerations. The final proposal was not amended in response to these comments.

4. Two comments requested that hand-held analyzers be allowed to establish compliance for the purposes of certification, as an alternative to the source test methods specified in the draft rule. District staff believes that, although hand-held analyzers may be used at lower cost than source test equipment, and that the quality of data provided by hand-held analyzers is sufficient for periodic testing, the quality of data is insufficient for establishing compliance for certification purposes. Only one test per heater model is required, and there are numerous testing firms throughout the country that are able to perform the required tests. The final proposal was not amended in response to these comments.

5. One comment requested a further time extension for compliance for heaters rated less than 10 MM BTU/hr from 1/1/2013, as proposed in the final proposal, to 1/1/2014 based on the poor regional economic environment and the high cost of compliance. The compliance date extension is the primary reason for this proposed amendment and District staff has carefully considered all known factors in proposing an extension to 1/1/2013. No additional information has arisen that suggests that a further extension is justified. The final proposal was not amended in response to this comment.

The final proposed amendments and staff report addendum were posted for public review on April 4, 2011. No further comments were received on these documents as of April 18, 2011.

IX. CONCLUSIONS

Pursuant to the California Health and Safety Code Section 40727, before adopting, amending, or repealing a rule the Board of Directors must make findings of necessity, authority, clarity, consistency, non-duplication and reference. The proposal is:

- Necessary to correct the problems identified with the 2008 amendments, while continuing to support the District's ability to attain the State one-hour and eight-hour ozone standards;
- Authorized by California Health and Safety Code Section 40702;
- Clear, in that the new regulation specifically delineates the affected industries, compliance options and administrative and monitoring requirements for industry subject to this rule;
- Consistent with other District rules, and not in conflict with state or federal law;
- Non-duplicative of other statutes, rules or regulations; and
- The proposed regulation properly references the applicable District rules and test methods and does not reference other existing law.

The proposed changes to the 2008 amendments do not require any revision to the findings made in the 2008 Negative Declaration and will not cause or contribute to any significant adverse environmental impact. As a result, the Addendum to the Negative Declaration is appropriate to satisfy the CEQA requirements for environmental review of the proposed changes to the 2008 amendments. The Addendum will be available to the public prior to any public hearing in which the Board of Directors of the Air District considers the Addendum for approval.

Staff recommends the adoption of the proposed amendments to Regulation 9, Rule 7: *Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters,* and Regulation 1: *General provisions and Definitions*, and approval of the CEQA Addendum to the July, 2008 Negative Declaration.

X. REFERENCES

1. Bay Area Air Quality Management District: "*Staff Report: Proposed Amendments to BAAQMD Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide From Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters*"; June 2008.

Appendix A

2011 Addendum to the 2008 Socioeconomic Analysis and 2008 Socioeconomic Analysis

APPLIED DEVELOPMENT ECONOMICS

MEMO

TO: Dan Belik, Rule Development Manager, BAAQMD
FROM: Doug Svensson and Tony Daysog, ADE
DATE: March 17, 2011

RE: Proposed Amendments to Regulation 9, Rule 7: Socioeconomic Impacts

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The Bay Area Air Quality Management District ("District") seeks to amend Regulation 9, Rule 7 ("Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters"). In particular, with the proposed amendments, the District seeks to extend the emissions compliance date for some sources from January 1, 2011, and January 1, 2012 to January 1, 2013, when those sources must comply with Rule 9-7.

This memorandum reviews Rule 9-7, reasons for the proposed amendments, and cost impacts, if any, stemming from the proposed amendments regarding extending the emissions compliance deadline to January 1, 2013. This memorandum concludes that the proposed change in the emission compliance date will not result in any new socioeconomic impacts in addition to what was already analyzed by ADE in June, 2008.

BACKGROUND

In an effort to reduce the emissions of nitrogen oxides (NOx) in the District by requiring use of existing and generally available low-NOx technology in new, replacement and existing boilers, steam generators and process heaters ("heaters"), the BAAQMD Board of Directors on July 30, 2008 amended Rule 9-7 and adopted an Initial Study / Negative Declaration concerning the amendments pursuant to the California Environmental Quality Act (CEQA). The District staff report of March, 2011 describes in detail the initial amendments to Rule 9-7 adopted in July 2008, as well as factors leading up to the new amendments to Rule 9-7 proposed by the District (see BAAQMD, "BAAQMD Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters, March 2011).

Rule 9-7 as amended in July 2008 included new requirements for small, previously unregulated boilers, those between 2 and 10 million BTU/hr heat input. A key element to Rule 9-7 amendments adopted in July 2008 had to do with an approach that partially shifted the burden of understanding and complying with Regulation 9-7 requirements from the operators to the manufacturers of those boilers. The July 2008 amendments also included a January 1, 2011 emission compliance date for boilers in the 2 to 5 million BTU/hr heat input

size range and a January 1, 2012 emission compliance date for boilers in the 5 to 10 million BTU/hr heat input size range. Because many of these small boilers were expected to be replaced rather than retrofitted to meet the emission limits, boiler manufacturers were required to certify that their boilers were in compliance with the new emission limits.

By the January 1, 2011 deadline, no heater manufacturer had certified any heater model for compliance with Regulation 9-7, so no heaters fired with natural gas or LPG that are rated >2 to <10 MM BTU/hr are lawfully available for sale in the District. To address this problem, the District is now proposing to extend the dates by which the boilers between 2 and 10 million BTU/hr heat input must comply with the emissions limits until January 1, 2013. Also, in order to facilitate certification, the District is proposing to expand the methods available for certification. Finally, the District is taking this opportunity to make a number of minor corrections and clarifications to the rule. These proposed changes do not significantly alter the conclusions drawn in the staff report to the 2008 amendments.

SOCIOECONOMIC IMPACT ANALYSIS

The extension of the compliances deadlines from January 1, 2011 and January 1, 2012 to January 1, 2013 does not result in any new cost above and beyond what was already reported and analyzed as part of the socioeconomic impact analysis ("SIA") for the July, 2008 amendments to Rule 9-7, which concluded that impact stemming from that rule were less than significant. It is important to note that the SIA was conservative in nature as it was based on the total cost of heaters in compliance with Rule 9-7 as amended in July 2008, as opposed to the incremental difference between the total cost of new, compliant heaters and total cost of non-compliant heaters, which would have reduced impacts below the significance threshold even more.[1] As the proposed amendments under consideration now do not impose new costs above those already analyzed but in fact defer potential costs further into the future, this memo concludes that the proposed amendments do not result in any significant impacts on affected sources.

[1]Rule 9-7 amendments adopted in July 2008 did not require affected sources to replace or retrofit their respective non-compliant heaters, steam generators and or process heaters until the useful life of their respective units had been fully exhausted, so, for purposes of the SIA, any new impacts stemming from purchasing units in compliance with Rule 9-7 as amended in 2008 would have been the difference between the cost of the compliant units and the cost of previous non-compliant units which needed to be replaced eventually anyway.

SOCIOECONOMIC
ANALYSIS
PROPOSED RULE

PROPOSED AMENDMENTS TO REGULATION 9, RULE 7: NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL, INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS

June 18, 2008

Prepared for

Bay Area Air Quality
Management District

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APPLIED DEVELOPMENT ECONOMICS

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Committed to Achieving Clean Air to Protect the Public's Health and the Environment

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1. DESCRIPTION OF THE PROPOSED RULE

In proposing amendments to Regulation 9, Rule 7, the Bay Area Air Quality Management District ("District") seeks to reduce emissions of nitrogen oxides (NOx) by lowering the current NOx emission limits, as well as by extending applicability of the regulation to particular boilers, steam generators and process heaters operating in various industrial, commercial and institutional settings. As it is, the existing regulation is a non-industry specific rule that applies to almost any combustion device that is not subject to a more specific combustion rule, including new and existing:

- Small boilers used to provide hot water or steam to office buildings, commercial establishments, schools, hospitals, hotels and industrial facilities;
- Larger boilers used to provide hot water or steam for industrial uses; and
- Process heaters used to heat material streams at industrial facilities.

Regulation 9, Rule 7 currently does not apply to space heating, except where hot water or steam is used for heating; to devices that burn only natural gas or liquefied petroleum gas (LPG) fuel and that have an input heat rating less than 10 million BTU/hr (10 MM BTU/hr); to devices that burn non-gaseous fuel and that have an input heat rating less than 1 MM BTU/hr; or to devices classified as ovens, kilns, furnaces or dryers. Similarly, no Air District Permit to Operate is required for natural gas or LPG-fueled devices rated less than 10 MM BTU/hr. The proposed amendments will:

- Expand the rule applicability for natural gas/LPG devices from an input heat rating of 10 MM BTU/hr or more to a rating of greater than 2 MM BTU/hr and establish NOx and CO emission limits for this size category;
- Reduce the NOx emission limit for devices already subject to this rule – gas-fired devices

with an input heat rating of 10 MM BTU/hr or more;

- Establish a manufacturer certification requirement for new devices with a heat rating greater than 2 and less than 10 MM BTU/hr and operator registration requirements for new and existing devices in this size range; and
- Establish insulation requirements, stack gas temperature limits and tune-up requirements to ensure reasonable energy efficiency which will reduce fuel used, the resultant NOx emissions and greenhouse gas emissions.

In conjunction with the proposed amendments to Regulation 9, Rule 7, the District also proposes to amend *Regulation 3: Fees, Schedule R: Equipment Registration Fees*. A fee of $425 is proposed for devices required to be registered under Regulation 9, Rule 7. This fee will cover the Air District's costs of inspecting boilers and reviewing certifications.

2. IMPACT OF PROPOSED RULE AMENDMENTS

This section of the socioeconomic analysis describes demographic and economic trends in the San Francisco Bay Area (Bay Area) region. Following an overview of the methodology for the socioeconomic analysis, the first part of this section compares the Bay Area against California and provides a context for understanding demographic and economic changes that have occurred within the Bay Area between 1996 and 2006. After an overview of Bay Area industries, we focus on industries impacted by the proposed Regulation 9, Rule 7.

For the purposes of this report, the Bay Area region is defined as Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

METHODOLOGY

The socioeconomic analysis of the proposed amendments involves the use of information provided directly by BAAQMD, as well as secondary data used to describe the industries affected by the proposed rule amendments.

Based on information provided by BAAQMD staff, ADE determined that the impacts could affect a number of businesses in a wide range of industries in the private and public sectors, with a certain amount of these devices used especially by hospitals and larger manufacturers. Based on information sources including Pacific Gas and Electric (PG&E), the District believes that there are approximately 8,000 gas-fired heaters in the Bay Area rated less than 10 MM BTU/hr, and that about 1/3 of these, approximately 2,634 are rated greater than 2 and less than 10 MM BTU/hr, and therefore will become subject to the amended Regulation 9, Rule 7. These 2,634 heaters are estimated to be distributed in about 1,100 business establishments. In addition to these heaters rated less than 10 MM BTU/hr, the BAAQMD also estimates that there are 311 heaters rated 10 MM BTU/hr or more operating at 151 business establishments.

In addition to identifying industries affected by the proposed amendments, understanding the broader economic context within which District staff and leaders are contemplating certain proposed rules is important part of the socioeconomic analysis. To this end, ADE analyzed industry trends with respect to a number of indicators such as business formation, job creation, revenue and profit generation, among others. Because the District organized cost data by land use categories of "commercial", "industrial", and "institutional," ADE translated economic data from the California Employment Development Department (EDD) into land use categories consistent with those of the District. As a result, analyses with respect to number of establishments by industry, employment, revenues and net profits are tracked by the commercial, institutional and industrial land use categories, not by industry. As part of its analysis, ADE excluded the five petroleum refineries operating in the Bay Area, as these facilities are subject to a separate rule, Regulation 9, Rule 10.

With data from the US Economic Census and other sources such as US IRS, ADE was able to estimate revenues and profit ratios for many of the industries and land use categories impacted by the proposed rule amendments. In calculating aggregate revenues generated by Bay Area businesses in affected industries, ADE first estimated annual revenue based upon available data. Using annual reports, publicly available data and data from Dun and Bradstreet, ADE calculated ratios of profit per dollar of sales for the businesses on which the analysis focused. In addition, ADE compared annual costs associated with proposed amendments to Regulation 9, Rule 7 to net profits generated by the average or typical establishment within a given land use category, adjusting for size of business in terms of number of workers.

In many of its previous socioeconomic analyses, ADE typically compared aggregate annual costs against aggregate annual industry revenues and estimated net profits, especially in analyses involving new rules or proposed amendments that affected all businesses in specific industries. While District staff knows for the most part what industries are affected by the existing rule and proposed amendments - namely large

manufacturers, regional medical centers, and certain commercial buildings - any number of businesses in a variety of industries are also potentially affected by this rule, in so far as these entities operate in facilities utilizing devices controlled by Regulation 9, Rule 7 as amended. For example, a large commercial building with an industrial boiler could contain any number of businesses in a variety of different industries. The analysis controls for multi-tenant settings, such as such as a shopping center, a large office complex, or industrial projects where many tenants operate within a common building.

The result of the socioeconomic analysis shows what proportion of profit the compliance costs represent. Based on a given threshold of significance, ADE discusses in the report whether the affected sites are likely to reduce jobs as a means of recouping the cost of compliance or as a result of reducing business operations. ADE also examines whether affected industries can pass costs to consumers. To the extent that such job losses appear likely, the indirect multiplier effects of the job losses area estimated using a regional IMPLAN input-output model.

REGIONAL DEMOGRAPHIC TRENDS

The Bay Area experienced moderate population growth from 1996 to 2006. Between 1996 and 2001, the nine-county region increased by 1.3 percent annually, from 6.5 million in 1996 to almost 6.8 million in 2001. From 1996 to 2006, the population increase was from 6.5 million to close to 7.1 million for an increase of approximately one percent annually. Over the same period, California grew at a faster rate of 1.4 percent per year.

Within the Bay Area, the greatest percentage increase occurred in Contra Costa County. From 1996 to 2006 Contra Costa increased its population by nearly 1.7 percent annually. All other Bay Area counties had population increases slower than Contra Costa County and the State. The smallest percentage increase occurred in Marin County where population grew annually by 0.5 percent from 1996 to 2006.

TABLE 1
Population Growth: San Francisco Bay Area

	Population			Annual Percent Change		
	1996	2001	2006	96-01	01-06	96-06
California	32,222,873	34,441,561	37,195,240	1.3%	1.6%	1.4%
Bay Area	6,454,434	6,872,313	7,135,505	1.3%	0.8%	1.0%
Alameda County	1,356,339	1,465,753	1,509,981	1.6%	0.6%	1.1%
Contra Costa County	872,631	966,845	1,030,732	2.1%	1.3%	1.7%
Marin County	239,251	248,994	253,818	0.8%	0.4%	0.6%
Napa County	118,381	126,093	134,326	1.3%	1.3%	1.3%
San Francisco County	759,833	784,031	800,099	0.6%	0.4%	0.5%
San Mateo County	693,815	712,527	726,336	0.5%	0.4%	0.5%
Santa Clara County	1,620,744	1,701,665	1,780,449	1.0%	0.9%	0.9%
Solano County	371,453	401,662	421,542	1.6%	1.0%	1.3%
Sonoma County	421,987	464,743	478,222	1.9%	0.6%	1.3%

Source: Applied Development Economics, based on household population estimates from The California Department of Finance

REGIONAL ECONOMIC TRENDS

The Bay Area is one of the world's greatest regional economies. It benefits from pre-eminent knowledge-based industries, with competitive strength flowing from an unmatched culture of entrepreneurship, world-leading research institutions, and some of the nation's best educated and most highly skilled workforce. However, in the five year period between 2001 and 2006, the Bay Area economy has not grown significantly with respect to employment, which contrasts with robust employment growth in the Bay Area between 1996 and 2001.

As Table 2 shows, as of 2006, the professional and business services sector was the largest employer in the region, at 554,576 jobs or 17 percent of all private and public sector jobs. This is a slight change from 1996 when professional and business services accounted for 16 percent of all Bay Area employment. While professional and business services increased annually by a rapid rate of four percent between 1996 and 2001, between 2001 and 2006 employment actually declined in this sector by an annual clip of two percent. The broad category of Trade, Transportation and Utilities also boasts large workforce at 17 percent of total public and private employment; but a large part of this category consists of workers in Retail, a sub-sector within Trade,

Transportation and Utilities. Another large industry in the Bay Area is public service, or government, with 442,000 jobs, or almost 14 percent of the total. Within the public sector, employment has risen fastest since 2001 in state government, whereas local government employment barely grew at a 0.2 percent annual pace between 2001 and 2006, and employment in federal agencies declined over the five year period. Employment in manufacturing accounted for slightly over 10 percent of total employment, but this sector declined significantly between 2001 and 2006, dropping annually by over five percent. Overall, since 2001, total public and private employment dropped slightly by over one percent a year, going from 3,484,800 workers in 2001 to 3,275,600 workers in 2006.

TABLE 2
Employment Profile of the San Francisco Bay Area, 1996-2006

Industry	1996	2001	2006	% of Total Employment in 2006	Annual Percent Change 1996 - 2001	Annual Percent Change 2001 - 2006
Total, all private industries	2,654,847	3,047,015	2,833,513		2.8%	-1.4%
Goods-Producing	612,549	682,135	567,697		2.2%	-3.6%
Natural Resources and Mining	26,861	29,517	22,760	0.7%	1.9%	-5.1%
Construction	128,937	192,338	192,897	5.9%	8.3%	0.1%
Manufacturing	456,754	460,281	352,040	10.7%	0.2%	-5.2%
Service-Providing	2,042,295	2,364,884	2,265,815		3.0%	-0.9%
Trade, Transportation, and Utilities	563,672	608,241	561,357	17.1%	1.5%	-1.6%
Information	96,876	147,581	112,820	3.4%	8.8%	-5.2%
Financial Activities	194,069	208,854	213,378	6.5%	1.5%	0.4%
Professional and Business Services	509,591	619,989	554,576	16.9%	4.0%	-2.2%
Education and Health Services	285,917	337,874	360,678	11.0%	3.4%	1.3%
Leisure and Hospitality	273,778	304,944	320,772	9.8%	2.2%	1.0%
Other Services	117,887	131,398	142,238	4.3%	2.2%	1.6%
Government Ownership:						
Federal Government	83,162	57,652	53,001	1.6%	-7.1%	-1.7%
State Government	108,771	81,895	87,874	2.7%	-5.5%	1.4%
Local Government	231,635	298,251	301,173	9.2%	5.2%	0.2%
Total, all public and private industries	3,078,415	3,484,813	3,275,561	100.00%	2.5%	-1.2%

Source: Applied Development Economics, Inc., based on Labor Market Information Division of the California Employment Development Department (California EDD-LMID)

Table 3 is similar to Table 2 except data is organized by general land use and building types. In addition, data is segregated by private and public sectors. Data is for 2006.

TABLE 3: Economic Profile By Land Use Categories and By Public-Private Ownership: San Francisco Bav Area. 2006

Ownership	NAICS	Industry Description	Type	Establishment	Employment
Private	11	Agriculture, Forestry, Fishing & Hunting	Other	1,836	21,213
Private	21	Mining	Industrial	76	2,076
Private	22	Utilities	Industrial	120	5,688
Private	23	Construction	Other Industrial	16,834	192,897
Private	31-33	Manufacturing	Industrial	9,134	352,040
Private	42	Wholesale Trade	Other	10,277	129,113
Private	44-45	Retail Trade	Commercial	20,846	336,232
Private	48-49	Transportation and Warehousing	Other Industrial	3,157	92,610
Private	51	Information	Office	3,834	112,820
Private	52	Finance and Insurance	Office	11,019	151,360
Private	53	Real Estate and Rental and Leasing	Office	9,991	62,020
Private	54	Professional and Technical Services	Office	29,299	312,042
Private	55	Management of Companies and Enterprises	Office	1,015	56,807
Private	56	Administrative and Waste Services (office)	Office	9,113	89,315
Private	56	Administrative and Waste Services (other industrial)	Other Industrial	395	96,408
Private	61	Educational Services	Institutional	2,681	69,327
Private	62	Health Care and Social Assistance (office)	Office	17,862	140,113
Private	62	Health Care and Social Assistance (institutional)	Institutional	775	151,240
Private	71	Arts, Entertainment, and Recreation	other	2,651	50,976
Private	72	Accommodation and Food Services	Commercial	15,430	269,797
Private	81	Other Services	Commercial	72,201	142,107
Private	99	Unclassified	other	53	131
Federal	44-45	Retail Trade	Commercial	7	761
Federal	48-49	Transportation and Warehousing	Other Industrial	272	22,856
Federal	51	Information	Office	1	10
Federal	52	Finance and Insurance	Office	6	272
Federal	54	Professional and Technical Services	Office	16	491
Federal	62	Health Care and Social Assistance	Institutional	4	6,650
Federal	71	Arts, Entertainment, and Recreation	other	11	717
Federal	72	Accommodation and Food Services	Commercial	5	84
Federal	81	Other Services	Commercial	1	41
Federal	92	State Government	Office	292	21,118
State	54	Professional and Technical Services	Office	2	201
State	61	Educational Services	Institutional	666	37,579
State	62	Health Care and Social Assistance (office)	Office	241	2,756
State	62	Health Care and Social Assistance (institutional)	Institutional	14	3,632
State	92	State Government	Office	697	23,270
Local	11	Agriculture, Forestry, Fishing & Hunting	Other	1	12
Local	22	Utilities	Industrial	80	7,790
Local	23	Construction	Other Industrial	24	3,258
Local	48-49	Transportation and Warehousing	Other Industrial	53	11,829
Local	51	Information	Office	45	4,320
Local	52	Finance and Insurance	Office	6	603
Local	53	Real Estate and Rental and Leasing	Office	5	502
Local	54	Professional and Technical Services	Office	5	502
Local	56	Administrative and Waste Services	Other Industrial	13	1,306
Local	61	Educational Services	Institutional	2,229	161,039
Local	62	Health Care and Social Assistance (office)	Office	27	9,780
Local	62	Health Care and Social Assistance (institutional)	Institutional	2	12,888
Local	71	Arts, Entertainment, and Recreation	other	58	9,787
Local	72	Accommodation and Food Services	Commercial	4	74
Local	81	Other Services	Commercial	20	574
Local	92	State Government	Office	384	94,526
				243,790	3,275,561

Source: ADE, Inc., based on California EDD-LMID

In Tables 4 and 5, we re-organize Table 3 data in terms of size of businesses by employment. These tables focus on the private and public sectors respectively. Of the 235,594 private establishments in the region, an estimated 136,631 employ between one and four workers (see Table 4). Of the 5,191 public establishments in the region, 2,496 employ between one and four workers (see Table 4).

TABLE 4
Establishments By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Private Sector (Excluding Refineries)

Type of Use	Establishments	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	190,609	114,984	30,750	21,860	14,691	5,062	2,449	518	157	139
Industrial	9,325	3,812	1,834	1,467	1,214	553	294	99	29	24
Other industrial	20,386	10,931	3,821	2,449	1,489	1,000	544	113	25	15
Institutional	3,456	1,693	410	278	189	555	240	56	21	14
Other	14,817	8,211	2,848	1,885	1,315	366	158	23	10	2
	238,594	139,631	39,663	27,938	18,898	7,536	3,685	809	241	194

Source: Applied Development Economics, based on California EDD LMID

TABLE 5
Establishments By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Public Sector

Type of Use	Establishments	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	1,765	857	323	264	177	83	49	8	3	1
Industrial	80	0	0	0	0	80	0	0	0	0
Other industrial	362	141	53	42	22	8	95	2	1	0
Institutional	2,914	1,498	564	443	234	88	55	20	7	6
Other	70	0	0	1	0	11	58	0	0	0
	5,191	2,496	940	749	433	270	257	30	10	6

Source: Applied Development Economics, based on California EDD LMID

Tables 6 and 7 are similar to the tables directly above; these tables distribute number of workers by land use and business size categories.

TABLE 6
Estimated Employment By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Private Sector (Excluding Refineries)

Type of Use	Employment	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	1,672,613	155,055	147,341	218,137	344,409	220,442	257,878	120,655	71,751	136,944
Industrial	359,804	10,395	16,734	27,830	55,209	52,428	64,697	47,274	27,881	57,355
Other industrial	381,915	19,000	23,199	30,817	44,596	76,529	94,537	42,753	20,603	29,883
Institutional	220,567	6,717	5,696	7,988	12,939	53,688	54,340	27,420	20,459	31,321
Other	201,433	18,593	21,953	29,888	49,106	29,734	30,094	9,724	7,902	4,438
	2,836,332	209,759	214,924	314,659	506,259	432,822	501,545	247,827	148,595	259,941

Source: Applied Development Economics, based on California EDD LMID

TABLE 7
Estimated Employment By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Public Sector

Type of Use	Employment	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	159,887	10,119	13,340	21,875	28,685	21,068	27,039	18,607	12,592	6,562
Industrial	7,790	0	0	0	0	7,790	0	0	0	0
Other industrial	39,249	1,377	1,815	2,954	3,716	2,756	20,419	3,061	2,072	1,080
Institutional	221,788	11,966	15,774	25,667	32,289	27,449	40,105	30,496	20,637	17,406
Other	10,516	0	0	12	0	717	9,787	0	0	0
	439,230	23,462	30,929	50,507	64,690	59,779	97,350	52,164	35,300	25,048

Source: Applied Development Economics, based on California EDD LMID

Tables 8 and 9 estimate revenues generated by the private and public sectors. With respect to the private sector, revenues are based on a revenue per workers formula, data for which comes from the Economic Census 2002. To estimate public sector allocations, the analysis employed a per capita rate based on typical average wages, benefits, and capital outlays at the local, state and federal levels. On average, the public sector per capita rate ranged from $120,000 to $160,000. Averages were then multiplied against aggregate number of workers organized by Table 7 above. Table 10 includes estimates on net profits generated by establishments within the various land use categories and employment size ranges. Estimated net profits are based on industry-specific rates gathered over a ten year period so as to control for period when rates might have been unusually high and periods when rates might have been unusually low, if not negative. Net profit data comes from the US IRS.

TABLE 8
Aggregate Revenue By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Private Sector (Excluding Refineries)

Type of Use	Aggregate Rev ('000)	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	277,519,904	21,993,227	22,700,715	34,743,145	53,609,189	38,293,169	47,541,414	22,347,614	12,297,291	23,994,141
Industrial	109,514,116	3,657,014	5,643,911	9,425,583	18,904,615	17,195,881	21,168,366	14,870,594	7,136,502	11,511,652
Other industrial	58,729,314	3,137,277	3,917,655	5,170,945	7,433,494	11,621,966	14,342,392	6,319,459	2,765,265	4,020,862
Institutional	20,100,851	464,941	394,324	552,961	895,653	5,102,169	5,164,108	2,605,835	1,944,316	2,976,544
Other	112,723,414	9,434,453	12,334,792	17,207,554	29,280,463	17,263,290	17,386,451	5,106,798	4,339,490	370,122
	578,587,598	38,686,911	44,991,397	67,100,188	110,123,412	89,476,474	105,602,730	51,250,300	28,482,864	42,873,322

Source: Applied Development Economics, based on California EDD LMID and US Economic Census

TABLE 9
Aggregate Revenue By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Public Sector

Type of Use	Aggregate Rev ('000)	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	22,357,486	1,416,703	1,867,618	3,062,451	4,015,886	2,949,475	3,758,851	2,604,941	1,762,812	918,750
Industrial	1,090,636	0	0	0	0	1,090,636	0	0	0	0
Other industrial	4,694,870	144,579	190,596	310,129	390,149	289,332	2,717,733	321,449	217,530	113,373
Institutional	30,541,816	1,675,187	2,208,373	3,593,348	4,520,518	3,734,986	5,457,189	4,149,580	2,808,098	2,394,537
Other	1,471,854	0	0	1,284	0	100,380	1,370,190	0	0	0
	60,156,661	3,236,470	4,266,587	6,967,212	8,926,553	8,164,808	13,303,962	7,075,969	4,788,440	3,426,660

Source: Applied Development Economics, based on California EDD LMID and California State Controller

TABLE 10
Aggregate Net Profits By Land Use Types and By Size of Business (Estimate): SF Bay Area, 2006: Private Sector (Excluding Refineries)

Type of Use	Est. Net Profits ('000)	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	$10,573,293	$892,499	$896,485	$1,352,752	$2,046,465	$1,397,561	$1,703,543	$909,191	$567,544	$807,252
Industrial	$3,425,909	$146,761	$203,400	$343,782	$713,012	$568,591	$701,731	$470,955	$163,394	$114,282
Other industrial	$1,893,355	$98,607	$125,828	$165,079	$235,801	$385,953	$464,251	$202,312	$87,046	$128,477
Institutional	$693,224	$17,745	$15,050	$21,105	$34,184	$173,525	$175,632	$88,625	$66,126	$101,232
Other	$2,331,625	$198,344	$256,097	$355,644	$601,773	$354,851	$357,669	$105,632	$89,310	$12,306
	$18,917,405	$1,353,957	$1,496,860	$2,238,361	$3,631,235	$2,880,481	$3,402,826	$1,776,714	$973,420	$1,163,549

Source: Applied Development Economics, based on California EDD LMID and US Economic Census

Table 11 translates aggregate net profit estimates in Table 10 into average net profit figures. For purposes of the socioeconomic analysis, public sector costs will compared against estimated gross revenues.

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TABLE 11
Average Net Profits By Land Use Types and By Size of Business: SF Bay Area, 2006 (Estimate): Private Sector (Excluding Refineries)

Type of Use	Est. Avg. Net Profits	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more
Commercial\Office	$55,471	$7,762	$29,154	$61,882	$139,304	$276,099	$695,701	$1,756,163	$3,613,898	$5,801,305
Industrial	$367,390	$38,503	$110,914	$234,390	$587,121	$1,028,783	$2,385,321	$4,749,300	$5,729,735	$4,807,688
Other industrial	$92,873	$9,021	$32,931	$67,409	$158,403	$385,912	$853,446	$1,797,860	$3,546,674	$8,308,011
Institutional	$200,578	$10,484	$36,693	$76,007	$180,845	$312,581	$732,153	$1,571,297	$3,144,693	$7,132,725
Other	$157,361	$24,155	$89,923	$188,688	$457,667	$969,995	$2,265,913	$4,564,473	$9,389,540	$6,835,736
	$79,287	$9,697	$37,739	$80,118	$192,153	$382,252	$923,536	$2,196,318	$4,045,059	$5,986,018

Source: Applied Development Economics, based on California EDD LMID and US Economic Census

Socioeconomic Impact Analysis: Commercial, Industrial and Industrial Boilers, Steam Generators and Process Heaters

This section of the report compares annual costs stemming from the rule against industry revenues and net profits. In making that comparison, this section of the report shows what proportion of profit the compliance costs represent. Based on a given threshold of significance, ADE discusses in the report whether the affected sites are likely to reduce jobs as a means of recouping the cost of compliance or as a result of reducing business operations. ADE also examines whether affected industries can pass costs to consumers. To the extent that such job losses appear likely, the indirect multiplier effects of the job losses area estimated using a regional IMPLAN input-output model.

When analyzing the socioeconomic impacts of proposed new rules and amendments, ADE works closely within the parameters of accepted methodologies discussed in a 1995 California Air Resources Board report called "Development of a Methodology to Assess the Economic Impact Required by SB513/AB969" (by Peter Berck, PhD, UC Berkeley Department of Agricultural and Resources Economics, Contract No. 93-314, August, 1995). The author of that report reviewed a methodology to assess the impact that California Environmental Protection Agency proposed regulations would have on the ability of California businesses to compete. Berck reviewed CARB's significance threshold in his analysis and wrote, "The Air Resources Board's (ARB) use of a 10 percent change in [Return on Equity] ROE (i.e. a change in ROE from 10 percent to a ROE of 9 percent) as a threshold for a finding of no significant, adverse impact on either competitiveness or jobs seems reasonable or even conservative." Because industry equity data is not easily readily available, particularly data that is relevant to the nine-county Bay Area, ADE compares annual costs against estimated annual net profits as defined as after-tax return on revenue or sales.

Table 12 below identifies the total cost of new devices that comply with Regulation 9, Rule 7 as amended. For purposes of a conservative analysis, we analyze the socioeconomic

impacts of the *total annual* cost of compliant devices, not the incremental portion of the total cost, even though the proposed amendments do not require businesses to replace or retrofit their respective heaters, steam generators and or process heaters until they have used at least part of the heater service life (5 or 10 years, depending on heater size). As Table 12 shows, on a weighted average basis, the total cost of compliant devices below and above 10 MM BTU\hr is $139,230 and $110,886 respectively.

TABLE 12
Total Cost of Devices Within Specified Ratings

Size Range (MM BTU/hr)	Avg Size (MM BTU/hr)	Number	Installed Cost Per Device
>2 to 5	4.2	1,238	$91,000
>5 to <10	4.2	1,396	$182,000
10 to <20	12.8	164	$87,600
20 to <75	32	125	$117,600
75 to < 410	120	5	$429,000
410	410	1	$1,500,000
Subtotals >2 to <10: Average	*4.2*		*$139,230*
Subtotals 10 and up: Average	*180.8*		*$110,886*

Source: ADE, Inc., based on BAAQMD (Note: Sub-Total averages based on all data set)

Table 13 below annualizes total costs presented in Table 12. As Table 13 shows, sources directly affected by the proposed amendment will incur $13,658 a year per device, for devices less than 10 MM BTU/hr. For devices greater than 10 MM BTU/hr, annual cost amounts to $10,878. As indicated earlier, these are *total* costs, which, for purposes of a conservative socioeconomic analysis, overstate actual impacts since the proposed amendments do not require businesses to replace or retrofit their respective heaters, steam generators and or process heaters until they have used at least part of the heater service life (5 or 10 years, depending on heater size). In other words, even if the proposed amendment is *not*

adopted, affected sources will still need to purchase a new device in the event their existing non-compliant boiler exhaust its useful life. Thus, in actuality, the impact stemming from the proposed amendments is the cost of the service life of the existing device that is not used, plus the difference between the new, code-compliant model and the older, non-compliant model, *not* the total cost of the new model. In any event, the analysis examines impacts stemming from the total cost of the new model.

TABLE 13
Annual Cost: Proposed Amendments Regulation 9, Rule 7

	< 10 MM BTU/hr	> 10 MM BTU/hr
Total Cost	$139,230	$110,886
Other Cost Factor	0.09	0.09
Capital Recovery Factor	0.09	0.09
TOTAL COST (Annualized)	$13,658	$10,878

Source: ADE, Inc., based on BAAQMD

It is important to note that, of the business impacted by the proposed amendments, a number will bear *a share* of total costs described in Table 13 above. Suppose a two-story commercial office complex with ten separate businesses uses a boiler less than 10 MM BTU/hr. While the average annual cost for this device is $13,658, the *share* of the Regulation 9, Rule 7 cost to affected businesses would be distributed among the different businesses within the affected building. In order to control for these instances, ADE examined the District's database to understand what kinds of facilities employ which devices, the MM BTUs of which are included in the District's database. Using a variety of sources and standard analytic factors with respect to square feet per workers, ADE then determined how many workers worked at these companies' facilities. Table 14 below is based on ADE's analysis, and it depicts an amount of MM BTU per worker. Table 14 divides information by land use types and number of employees. Thus, for the typical industrial establishment in the BAAQMD database that employs less

than 1000 workers, the input heat rating (MM BTU\Hr) per workers is 0.07488.

TABLE 14
MM BTU\hr per Bay Area Worker

	Commercial	Industrial	Institutional
< 1000 workers	0.01341	0.07488	0.01145
> 1000 workers	0.00216	0.02366	0.01145

Source: ADE, Inc., based on BAAQMD

Since the *average* input heat rating for the device less than 10 MM BTU\hr annually costing $13,658 is 4.2 MM BTU\hr, we can estimate minimum amount of MM BTU's needed for the *typical* establishment in the Bay Area. Table 15 below shows that, on average, a small business employing less than 50 workers in the commercial-office land use category employs five workers. If as Table 14 above shows, commercial operations employing less than 1000 workers exhibit input heat rating (MM BTU\Hr) per worker ratios of 0.01341, then the *typical* very small commercial-office establishment's MM BTU\Hr requirement is 0.0637.[1] This factor is then multiplied against $13,658 at 4.2 MM BTU\Hr to calculate the *annual share* of the total cost that a small business would absorb in the event it was located at a multi-tenant site that was purchasing a new compliant device (4.2 MM BTU\Hr @ $13,658 a year). Across the board, Tables 15 through 18 show that annual costs stemming from the proposed amendments are less than significant from the vantage point of the average Bay Area business within various land use categories and sizes.

[1] 0.0637 = 0.01341 x 5

TABLE 15
Socioeconomic Impact Analysis: Estimated Net Profits By Average Commercial Establishment By Size of Establishment Versus Share of Cost Attributable To Average Commercial Establishment

Private Commercial\Office	AVG EMP	AVG REV	NET PROFITS	AVG Device Size-Share	Share of Annual Cost Per Device: < 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: < 10 BTU\Hr Scenario	Sshare of Annual Cost Per Device: > 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: > 10 BTU\Hr Scenario
1 - 49	5	729,880	28,462	0.0637	$207	0.73%	$4	0.013%
50-99	44	7,565,112	276,099	0.5842	$1,900	0.69%	$35	0.013%
100-249	105	19,415,182	695,701	1.4127	$4,594	0.66%	$85	0.012%
250-499	233	43,165,897	1,756,163	3.1263	$10,167	0.58%	$188	0.011%
500-999	457	78,304,292	3,613,898	6.1289	$19,931	0.55%	$369	0.010%
1000+	984	172,433,598	5,801,305	2.1256	$6,913	0.12%	$128	0.002%

Source: ADE, Inc., based on California EDD and BAAQMD

TABLE 16
Socioeconomic Impact Analysis: Estimated Net Profits By Average Industrial Establishment By Size of Establishment Versus Share of Cost Attributable To Average Industrial Establishment

Industrial	AVG EMP	AVG REV	NET PROFITS	AVG Device Size-Share	Share of Annual Cost Per Device: < 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: < 10 BTU\Hr Scenario	Sshare of Annual Cost Per Device: > 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: > 10 BTU\Hr Scenario
1 - 49	13	4,519,343	168,970	0.9908	$3,222	1.91%	$60	0.035%
50-99	95	31,113,463	1,028,783	7.1036	$23,101	2.25%	$427	0.042%
100-249	220	71,955,396	2,385,321	16.4684	$53,556	2.25%	$991	0.042%
250-499	477	149,961,076	4,749,300	35.6999	$116,097	2.44%	$2,148	0.045%
500-999	978	250,255,448	5,729,735	73.2145	$238,095	4.16%	$4,405	0.077%
1000+	2,413	484,279,960	4,807,688	57.0906	$185,660	3.86%	$3,435	0.071%

Source: ADE, Inc., based on California EDD and BAAQMD

TABLE 17
Socioeconomic Impact Analysis: Estimated Net Profits By Average Institutional Establishment By Size of Establishment Versus Share of Cost Attributable To Average Institutional Establishment

Institutional	AVG EMP	AVG REV	NET PROFITS	AVG Device Size-Share	Share of Annual Cost Per Device: < 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: < 10 BTU\Hr Scenario	Sshare of Annual Cost Per Device: > 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: > 10 BTU\Hr Scenario
1 - 49	13	898,184	34,281	0.1486	$483	1.41%	$9	0.026%
50-99	97	9,190,851	312,581	1.1078	$3,603	1.15%	$67	0.021%
100-249	227	21,527,563	732,153	2.5948	$8,438	1.15%	$156	0.021%
250-499	486	46,200,988	1,571,297	5.5689	$18,110	1.15%	$335	0.021%
500-999	973	92,463,659	3,144,693	11.1452	$36,244	1.15%	$671	0.021%
1000+	2,207	209,724,109	7,132,725	25.2792	$82,208	1.15%	$1,521	0.021%

Source: ADE, Inc., based on California EDD and BAAQMD

TABLE 18
Socioeconomic Impact Analysis: Estimated Net Profits By Average Public Sector Establishments By Type of Use Versus Share of Cost Attributable To Average Public Sector Establishment

Public Sector	AVG EMP	AVG REV	AVG Device Size-Share	Share of Annual Cost Per Device: < 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: < 10 BTU\Hr Scenario	Sshare of Annual Cost Per Device: > 10 BTU\Hr Scenario	Annual Cost As Percent of Net Profits: > 10 BTU\Hr Scenario
Services\Office	91	$12,669,189	1.2154	$3,952	0.03%	$73	0.001%
Industrial	97	$13,632,945	7.2921	$23,714	0.17%	$439	0.003%
Institutional	76	$1,610,984	0.8718	$2,835	0.18%	$52	0.003%

Source: ADE, Inc., based on California EDD and BAAQMD

IMPACT ON SMALL BUSINESS

DEFINITION OF SMALL BUSINESS PER CALIFORNIA STATUTE

For purposes of qualifying small businesses for bid preferences on state contracts and other benefits, the State of California defines small businesses in the following manner:

- Must be independently owned and operated;
- Cannot be dominant in its field of operation;
- Must have its principal office located in California
- Must have its owners (or officers in the case of a corporation) domiciled in California; and,
- Together with its affiliates, be either:
  - A business with 100 or fewer employees, and an average gross receipts of $10 million or less over the previous tax years, or
  - A manufacturer with 100 or fewer employees

SMALL BUSINESS IMPACT ANALYSIS

The discussion above demonstrated that, across the board, impacts are below the significance threshold employed for purposes of socioeconomic analysis. In addition, the discussion above organized data by businesses in terms number of workers. Again, the analysis demonstrated no significant impacts. Thus, small businesses are not disproportionately impacted by the proposed amendments.

Appendix B

2011 Addendum to the 2008 CEQA Negative Declaration and 2008 CEQA Initial Study and Negative Declaration

Addendum to:

Initial Study/Negative Declaration for the Amendments to Bay Area Air Quality Management District Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators and Process Heaters

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Addendum to CEQA Initial Study / Negative Declaration for
Amendments to Regulation 9, Rule 7: *Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam generators and Process Heaters*

I. INTRODUCTION

On July 30, 2008, the Board of Directors of the Bay Area Air Quality Management District (the "Air District" or "District") adopted amendments to District *Regulation 9: Inorganic Gaseous Pollutants, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters* ("the 2008 Amendments") and an Initial Study / Negative Declaration concerning the Amendments (the "Negative Declaration") pursuant to the California Environmental Quality Act (CEQA). Subsequent to the adoption of the 2008 Amendments and the Negative Declaration, the Air District discovered that certain changes to the 2008 Amendments, primarily to compliance dates, are necessary in order to give full effect to its intent in adopting the amendments. These changes to the 2008 Amendments and their effect on the Negative Declaration are the subject of this Addendum. Each of these changes either constitutes a minor technical change to the 2008 Amendments, does not alter any conclusion stated in the Negative Declaration, or both.

II. BACKGROUND

i. The Intent of the 2008 Amendments

The intent of the Air District in adopting the 2008 Amendments to District *Regulation 9: Inorganic Gaseous Pollutants, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters* ("Regulation 9-7") was to reduce the emission of nitrogen oxides (NOx) in the District by requiring the use of existing and generally available low-NOx technology in new, replacement and existing boilers, steam generators and process heaters ("heaters").

The 2008 Amendments updated the Regulation 9-7 NOx emissions requirements for large commercial heaters, and also expanded Regulation 9-7 to apply to natural gas and LPG-fired heaters rated greater than 2 million to less than 10 million BTU/hr (MM BTU/hr), devices the District had not previously regulated. The 2008 Amendments also included new energy efficiency requirements intended to mitigate the possibility of increased greenhouse gas (GHG) emissions caused by reduced overall efficiency as a result of implementing NOx controls.

In expanding Regulation 9-7 to apply to smaller natural gas-fired heaters rated greater than 2 million to less than 10 MM BTU/hr, the District extended the rule to a large number of previously-unregulated people and sources. As a result, the District sought to minimize the cost and complexity of demonstrating compliance with the Rule in two ways. First, the 2008 Amendments allowed the owners of heaters rated greater than 2 million to less than 10 MM BTU/hr to register the devices with the District, instead

undergoing a more expensive full permitting process. Second, the 2008 Amendments required manufacturers to certify their heaters for compliance with the new requirements before offering them for sale within the District. This latter approach partially shifted the burden of understanding and complying with Regulation 9-7 requirements from the smaller heater operators to the manufacturers.

ii. Developments Subsequent to Adoption of the 2008 Amendments

On January 1, 2011, the new emission limits for heaters fired with natural gas or LPG and rated greater than 2 to 5 MM BTU/hr went into effect, along with the requirement that only pre-certified heaters in this size range be sold in the District. For devices rated greater than 5 to less than 10 MM BTU/hr, the emissions limits and certification requirement will go into effect on January 1, 2012. No manufacturer has applied to certify a heater model in either size range. However, heaters in both size ranges that comply with Regulation 9-7 requirements are available within the District. As a result, persons who must purchase a new heater to comply with the new emission limits of the 2008 Amendments cannot do so and also comply with the requirement to install only a pre-certified device.

Also, since the adoption of the 2008 amendments, the District discovered the need to provide a number of minor corrections and clarifications to Regulation 9-7.

III. CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS

The California Environmental Quality Act (CEQA) Guidelines, allow "[a]n addendum to an adopted negative declaration [to] be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred." (14 CCR 15164(b).)

Section 15162, subdivision (a), of the CEQA Guidelines establishes the following circumstances that would require the preparation of a subsequent EIR:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

- The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
- Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

IV. IMPACT OF THE PROPOSED CHANGES TO THE 2008 AMENDMENTS ON THE AIR DISTRICT'S CEQA ANALYSIS

i. The Negative Declaration for the 2008 Amendments

The Board of Directors of the Air District adopted the Negative Declaration for the 2008 Amendments on July 30, 2008. The Negative Declaration evaluated the potential impacts of the 2008 Amendments, and concluded the amendments would result in no significant adverse impact.

The primary impact of the 2008 Amendments that the Negative Declaration identified was a beneficial impact, specifically, that the 2008 Amendments would have a positive impact on air quality by reducing emissions of NOx and particulate matter (PM) in the Bay Area. NOx is a precursor to the formation of smog. In addition, NOx can convert into ammonium nitrate, forming PM.

As the Negative Declaration identified no significant adverse impact that might result from the 2008 Amendments, no mitigation measure was necessary and the Negative Declaration did not provide for any.

ii. The Proposed Changes to the 2008 Amendments and Their Effect on the Analysis in the Negative Declaration

None of the proposed changes to the 2008 Amendments implicate any of the conditions listed in Section 15162, subdivision (a), of the CEQA Guidelines. In addition, many of the changes are only minor technical changes to the 2008 Amendments.

The District proposes to extend the emissions limitations compliance dates until January 1, 2013 for heaters rated greater than 2 million to less than 10 MM BTU/hr, and to extend the certification dates until January 1, 2012. Also, in order to facilitate certification, the District proposes to allow additional test methods, including U.S. EPA and CARB methods, for measurement of emission rates. Finally, the District proposes to make a number of minor technical corrections and clarifications to Regulation 9-7.

The proposed extension of new NOx emission limits by either one or two years (for heaters rated greater than 2 to 5 MM BTU/hr, and heaters rated greater than 5 to less than 10 MM BTU/hr, respectively) to January 1, 2013 would not create a significant adverse impact on the environment, nor would it affect the analysis or conclusions in the Negative Declaration. Its only impact would be at most to delay slightly the beneficial reductions of NOx and PM emissions that will result from the 2008 amendments. Furthermore, a compliance survey by the District has revealed a high level of non-compliance for heaters rated greater than 2 million to less than 10 MM BTU/hr, so the delay in the compliance date will delay reductions of NOx emissions by less than the one or two year extension would indicate.

Likewise, neither the proposed changes to the pre-certification program for new heaters rated greater than 2 million to less than 10 MM BTU/hr, including the allowance of additional test methods, nor the minor corrections and clarifications proposed to Regulation 9-7 would affect the analysis or conclusions of the Negative Declaration. Each of these proposed changes constitutes a minor technical change to the 2008 amendments that would not cause any significant adverse impact on the environment.

V. CONCLUSION

The proposed changes to the 2008 amendments do not require any revision to the findings made in the 2008 Negative Declaration and will not cause or contribute to any significant adverse environmental impact. As a result, the Addendum to the Negative Declaration is appropriate to satisfy the CEQA requirements for environmental review of the proposed changes to the 2008 amendments.

An addendum need not be circulated for public review. (14 CCR § 15164(c).) However, this Addendum will be made available to the public prior to the public hearing in which the Board of Directors of the Air District considers the proposed amendments to Regulation 9-7 and this Addendum for adoption.

Initial Study/Negative Declaration for the Amendments to Bay Area Air Quality Management District Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators and Process Heaters

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Chapter 1

Introduction

Purpose of this Document

This Negative Declaration (Neg Dec) assesses the environmental impacts of the proposed adoption of amendments to Regulation 9, Rule 7 – Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters - by the Bay Area Air Quality Management District (BAAQMD or District). This assessment is required by the California Environmental Quality Act (CEQA) and in compliance with the state CEQA Guidelines (Title 14 California Code of Regulations §15000 et seq.). A Neg Dec serves as an informational document to be used in the decision-making process for a public agency that intends to carry out a project; it does not recommend approval or denial of the project analyzed in the document. The BAAQMD is the lead agency under CEQA and must consider the impacts of the proposed rule amendments when determining whether to adopt them. The BAAQMD has prepared this Neg Dec because no significant adverse impacts are expected to result from the proposed rule amendments.

Scope of this Document

This document evaluates the potential impacts of the proposed amendments on the following resource areas:

- aesthetics,
- agricultural resources,
- air quality,
- biological resources,
- cultural resources,
- geology and soils,
- hazards and hazardous materials,
- hydrology and water quality,
- land use planning,
- mineral resources,

- noise,
- population and housing,
- public services,
- recreation,
- transportation and traffic, and
- utilities and service systems.

Impact Terminology

The following terminology is used in this IS/ND to describe the levels of significance of impacts that would result from the proposed rule amendments:

- An impact is considered *beneficial* when the analysis concludes that the project would have a positive effect on a particular resource.
- A conclusion of *no impact* is appropriate when the analysis concludes that there would be no impact on a particular resource from the proposed project.
- An impact is considered *less than significant* if the analysis concludes that an impact on a particular resource topic would not be significant (i.e., would not exceed certain criteria or guidelines established by BAAQMD). Impacts are frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource.
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that an impact on a particular resource topic would be significant (i.e., would exceed certain criteria or guidelines established by BAAQMD), but would be reduced to a less than significant level through the implementation of mitigation measures.

Organization of This Document

The content and format of this document, described below, are designed to meet the requirements of CEQA.

- Chapter 1, "Introduction," identifies the purpose, scope, and terminology of the document.
- Chapter 2, "Description of the Proposed Rule," provides background information of Regulation 9, Rule 7, describes the proposed rule amendments, and describes the area and facilities that would be affected by the amendments.
- Chapter 3, "Environmental Checklist," presents the checklist responses for each resource topic. This chapter includes a brief setting description for each resource

area and identifies the impact of the proposed rule amendments on the resources topics listed in the checklist.

- Chapter 4, "References Cited," identifies all printed references and personal communications cited in this report.

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Chapter 2

Description of the Proposed Rule

BACKGROUND

The BAAQMD regulates NO_x emissions from boilers, steam generators, and process heaters that are used in industrial, institutional or commercial applications under Regulation 9, Rule 7, ("Regulation 9-7"). Regulation 9-7 currently imposes a 30 ppmv NO_x limit on industrial, institutional, and commercial boilers with a rated heat input of 10 million British thermal units per hour (MMBtu/hr) or more; devices that use non-gaseous fuel that have a heat rating of 1 MMBtu/hr or more have a 40 ppmv NO_x limit. Regulation 9-7 was adopted September 15, 1993. Bay Area 2005 Ozone Strategy Control Measure SS-12 (Nitrogen Oxides and Carbon Monoxides from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters) proposed amendments to Bay Area Air Quality Management District Regulation 9-7. The proposed amendments to Regulation 9-7 would implement Control Measure SS-12 by supplementing existing requirements in Regulation 9-7.

Regulation 9-7 is a non-industry specific rule that applies to almost any combustion device that is not subject to a more specific combustion rule, including new and existing small boilers used to provide hot water or steam to office buildings, commercial establishments, hospitals, hotels and industrial facilities; larger boilers used to provide hot water or steam for industrial uses; and process heaters used to heat material streams at industrial facilities. For simplicity, all these devices are referred to as heaters in this document. Regulation 9-7 does not apply to residential central furnaces, residential water heaters, combustion devices used in petroleum refineries, or electric utility steam boilers. Also, Regulation 9-7 does not apply to space heating; to devices that burn only natural gas or liquefied petroleum gas (LPG) fuel and that have a heat rating less than 10 MMBtu/hr); to devices that burn non-gaseous fuel and that have a heat rating less than 1 MMBtu/hr; or to devices classified as ovens, kilns, furnaces or dryers.

OBJECTIVES

In Control Measure SS-12, the District suggested review of NOx emission requirements for industrial, institutional, and commercial boilers, steam generators, and process heaters. The objective of the amendments for Regulation 9-7 is to further reduce NOx emissions from natural gas or LPG-fired devices in order to reduce ozone levels in the Bay Area and reduce transport of air pollutants to neighboring air basins. The Bay Area and neighboring regions are not yet in attainment with the State one-hour ozone standard, so further reductions in ozone precursors, NOx and reactive organic gases (ROG), are needed. Additional NOx reductions can be achieved by a technique involving the premixing of fuel and air before combustion takes place in water heaters, boilers and

process heaters. This results in a lower and more uniform flame temperature, which reduces formation of NOx.

The U.S. Environmental Protection Agency (U.S. EPA) has set primary national ambient air quality standards for ozone and other air pollutants to define the levels considered safe for human health. The California Air Resources Board (CARB) has also set a California ozone standard. The Bay Area is a non-attainment area for the state one-hour ozone standard and federal eight-hour ozone standard. Under State law, ozone non-attainment areas must prepare plans showing how they will attain the state standard. The 2005 Ozone Strategy is the most recent planning document for the State one-hour ozone standard. Because the Bay Area is a marginal non-attainment area for the national eight-hour standard, the least severe non-attainment classification, the BAAQMD is not required to prepare an attainment plan for the national standard. In addition, NOx emissions react in the atmosphere to form secondary particulate matter. The Bay Area is not in attainment of California ambient air standards for particulate matter of 10 microns or less (PM10) or for particulate matter of 2.5 microns or less (PM2.5).

RULE AMENDMENTS BEING CONSIDERED

A summary of the amendments to Regulation 9-7 are included in Table 2-1.

Extend Regulation 9-7 to Heaters Rated Less Than 10 MM BTU/hr

Control Measure SS-12 proposes extending the applicability of Regulation 9-7 to heaters with a maximum firing capacity below 10 MMBtu/hr. Several California air districts have adopted rules that apply a 30 ppmv NOx concentration standard to heaters with heat ratings as low as two MMBtu/hr. Compliance with a 30 ppmv NOx standard is achievable for heaters burning natural gas or LPG fuel by retrofitting existing burners with low-NOx burners. However, for some heaters a low-NOx burner retrofit may not be available or may not be practical to install and these devices would have to be replaced. If a retrofit is available, it may require that the maximum firing capacity of the heater be reduced or may result in an overall loss of efficiency that would require the device to be replaced. The proposed amendments establish a 30 ppmv exhaust concentration limit for heaters rated up to 5 MMBtu/hr. In addition, the proposed amendments establish a 15 ppmv exhaust concentration limit for heaters rated greater than 5 but less than 10 MMBtu/hr. A low-fuel usage exemption is proposed for heaters with annual fuel use less than 10% of capacity utilization. This is equivalent to 90,000 therms per year for a 10 MMBtu/hr boiler.

The Air District has proposed an effective date for the standards affecting heaters rated less than 5 MMBtu/hr of 1/1/2011, although a heater manufactured prior to 1/1/2011 would not be subject to the proposed NOx standards until 10 years after its original manufacture date. Heaters manufactured on or after 1/1/2011 would be subject to the proposed standards on 1/1/2011.

TABLE 2-1

Reg. 9-7 Proposed Amendment Summary

Heater Size Range (MMBtu/hr)	Devices(1)	Current NOx (ton/day)(2)	Current NOx (ppmvv)(3)	Proposed NOx (ppmvv)	NOx Reduc-tion (ton/day)
>2 to 5	1238	2.01	78	30	1.15
>5 to <10	1396	2.27	78	15	1.72
>2 to <10 TOTALS	2634	4.28			2.87
10 to <20	164	0.26	30	15	0.06
20 to <75	125	0.56	30	9	0.19
75 to <410	21	0.09	27	5	0.07
410	1	0.02	12	5	0.01
10 and larger TOTALS	311	0.93			0.33
TOTALS	**2945**	**5.21**			**3.20**

Notes:
(1) The number of devices in the >2 to 5 and >5 to <10 categories is estimated to be 2634.
(2) BAAQMD Staff Report for Regulation 9, Rule 7.
(3) The current NOx emission rate for each subcategory is 30 ppmvv for sub-categories subject to the current rule and 78 ppmvv for the sub-categories of devices <10 MM BTU/hr that are not currently subject to the rule. For the categories "75 to <410", the emission rate is lower than 30 ppmvv because devices that have a permit condition limit of 9 ppmvv have been incorporated on a weighted basis. For the sole 410 MM BTU/hr unit, the emission rate is the permit condition requirement for the one device in the sub-category (Permit Condition 14049.50).

The proposed amendments to Regulation 9-7 would establish a manufacturer certification requirement for new gas-fired devices rated more than 2 but less than 10 MMBtu/hr, and establish a registration program for operators of new and existing devices in this size range.

Reduce Regulation 9-7 NOx Exhaust Concentration Limits

Some California air districts have adopted rules that apply NOx concentration limits less than 30 ppmv to heaters with heat ratings of 10 MMBtu/hr or more. For heaters with heat ratings higher than 20 MMBtu/hr, compliance with a 9 ppmv NOx limit has been achieved with natural gas or LPG fuel by retrofitting ultra low-NOx burners with or without flue gas recirculation (FGR) to control NOx formation, or by installing selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) to reduce the NOx concentration in the heater exhaust. However, for some heaters an ultra low-NOx burner retrofit may not be available or may not be practical to install and these devices would have to be replaced. For some heaters FGR or SCR/SNCR may not be practical to install because of space limitations. For load-following heaters, SCR/SNCR may not achieve a 9 ppmv concentration, so a limit of 15 ppmv is proposed for these devices of 20

MMBtu/hr or more. For some heaters, installation of ultra low-NOx burners or FGR may require that the maximum firing capacity of the heater be reduced or may result in an overall loss of efficiency that would require the heater to be replaced.

Heaters Rated Between 5 MMBtu/hr and 20 MMBtu/hr: For heaters with heat ratings between 10 and 20 MMBtu/hr, compliance with a 15 ppmv NOx standard has been proposed since it has been achieved with natural gas or LPG fuel by retrofitting ultra low-NOx burners with or without flue gas recirculation (FGR). However, as for larger heaters, an ultra low-NOx burner retrofit or FGR may not be available or may not be practical to install and these devices would have to be replaced or have their maximum firing capacity reduced. The Air District has proposed an effective date for the standards affecting heaters rated from 10 MMBtu/hr up to 20 MMBtu/hr of 1/1/2012, although a heater manufactured prior to 1/1/2012 would not be subject to the proposed NOx standard until 10 years after its original manufacture date. Heaters manufactured on or after 1/1/2012 would be subject to the proposed standards on 1/1/2012. Facilities with multiple units would be allowed to comply over several years. An initial source test for heaters of at least 10 MMBtu/hr and periodic compliance monitoring for all heaters will be required.

Heaters Rated Between 20 MMBtu/hr and less than 75 MMBtu/hr: For heaters rated from 20 to less than 75 MMBtu/hr, a 9 ppmv NOx limit is proposed, effective January 1, 2011. Compliance with this limit can be achieved with ultra-low NOx burners with FGR. Some operators may elect to use SCR to comply with this standard. All of the devices in this size category are required to have air permits and only 19 currently operate at NOx emissions lower than 30 ppmv (only one operates at 9 ppmv). Therefore, all but one of the heaters in this size category will have to be modified or replaced if they continue to operate after January 1, 2011. New heaters installed on or after January 1, 2012 will be subject to the new standard upon installation. Heaters in service prior to January 1, 2012 will become subject to this standard upon reaching a service life of five years. Facilities with multiple heaters would be allowed to comply over several years.

Heaters Rated More than 75 MMBtu/hr: For heaters rated 75 MMBtu/hr and higher, Regulation 9-7 would require a NOx standard of 5 ppmvv, effective January 1, 2012. the five-year Service Life Allowance granted to heaters over 20 MMBtu/hr would apply to these heaters as well. Heaters in this size range would be expected to use SCR or SNCR to comply with these standards. An initial source test and periodic compliance monitoring will be required.

Other Proposed Amendments: Landfill gas and wastewater digester gas fuels have greater variability in heat value and other specifications than natural gas. This variability makes it more difficult to optimize a heater that uses these fuels for low NOx emissions. For this reason, and because combustion of these fuels is quite limited in the Bay Area, the proposed amendments establish a 30 ppmv NOx limit for these fuels in every regulated size category.

Regulation 9-7 currently allows a 40 ppmv NOx limit for combustion of non-gaseous fuels in heaters with heat ratings of 10 MMBtu/hr or more, compared to 30 ppmv for gaseous fuels. Because non-gaseous fuels cannot be mixed with combustion air as completely as gaseous fuels, reduction of combustion hot-spots and associated NOx formation is more difficult for non-gaseous fuels. For this reason, and because combustion of non-gaseous fuel is quite limited in the Bay Area, the proposed amendments retain a 40 ppmv NOx limit for nongaseous fuel in heaters in every regulated size category. Heaters firing a combination of non-gaseous and gaseous fuels would have to meet a heat-input weighted average of the applicable NOx limit for the heater size category and the 40 ppmv non-gaseous fuel limit.

Heaters with input heat ratings up to 10 MMBtu/hr would be exempt from the new standards if they use less than 10% of their maximum heat capacity per year. These heaters would require annual tune-ups and would be required to operate at less than 3% stack gas oxygen content. Low-usage heaters larger than 10 MMBtu/hr would also be required to meet a 30 ppmv NOx standard.

Insulation Requirements

Heat loss from inadequately insulated surfaces is typically one of the largest contributors to energy inefficiency in a heater. Energy inefficiency results in increased fuel consumption with related emissions of NOx and greenhouse gases. The proposed amendments to Regulation 9-7 require insulation of all heaters subject to the rule, such that exposed surfaces do not exceed 120 degrees Fahrenheit, effective January 1, 2010. Some exemptions are provided for safety reasons, to high-temperature water boilers as defined in the California Code of Regulations, to surfaces that must remain un-insulated for safety or operational reasons, to boilers with at least one inch of insulation, and to exhaust stacks. This requirement applies to boilers and steam generators, but not to process heaters.

Inspection and Tune-Up Requirements

Currently, Regulation 9-7 requires tune-ups only for heaters that qualify for a low fuel-usage exemption, in lieu of compliance with the 30 ppmv NOx limit. The proposed amendments to Regulation 9-7 includes an annual tune-up requirement for most heaters subject to the rule, effective in 2009. A tune-up consists of re-optimizing the air to fuel ratio. Tune-ups can reduce energy inefficiency by as much as 10%, reducing fuel usage, CO_2 and NOx emissions. Inspections will check for blowdown rates, and heater and stack gas temperatures. Blowdown rates can be adjusted to manufacturers specifications, reducing energy loss from heat in the liquid blowdown stream.

Stack Gas Temperature Limits

Regulation 9-7 proposes stack gas temperature limits that would become effective on January 1, 2011. The rule would limit stack gas temperatures in firetube boilers or steam generators to no more than 100°F over the steam or water temperature for gaseous or

non-gaseous fuel or 250°F over the ambient temperature for gaseous fuel or 300°F over the ambient temperature for non-gaseous fuel. The stack gas temperature in watertube boilers and steam generators would be limited to no more than 150°F in over the steam or water temperature for gaseous and non-gaseous fuel, or to the same temperature increments over the ambient temperature as firetube boilers. This requirement applies to boilers and steam generators, but not to process heaters.

Periodic Monitoring

To ensure that heaters rated at 10 MMBtu/hr or more operate in compliance with Regulation 9-7, periodic monitoring of these devices will be required.

PROPOSED METHOD OF CONTROL

Emission Mechanisms and Controls

The primary products of any combustion process are water vapor (H_2O) and the greenhouse gas carbon dioxide (CO_2). Because CO_2 is a necessary product of combustion, the only way to reduce CO_2 emissions from a combustion process without reducing the output of useful energy is to increase the thermal efficiency of the process, thereby reducing the fuel consumption rate.

In addition, all combustion processes produce all of the specific pollutants regulated by the Air District: carbon monoxide (CO), nitrogen oxides (NOx), sulfur oxides (SOx), volatile organic compounds (VOCs) and particulate matter. CO and NOx emissions are the focus of Regulation 9-7 and Control Measure SS 12. Emissions of SOx, VOCs and particulate matter are negligible compared to those of NOx, CO and CO_2 when natural gas fuel is used.

NOx Emissions

In addition to fuel, combustion requires oxygen, so that carbon in the fuel can be oxidized to CO_2 and hydrogen in the fuel to H_2O. Because ambient air is used as an oxygen source, and because ambient air contains almost four times as much nitrogen gas (N_2) as oxygen gas (O_2), N_2 gas is exposed to the high temperatures of the combustion process. Some of this N_2 gas is oxidized into NO and NO_2 (collectively known as NOx) and emitted in the combustion exhaust stream. This emitted NOx is known as “thermal NOx” because its formation depends on exposure to combustion temperatures – higher combustion temperatures and longer exposure result in a greater NOx formation rate and higher concentrations of NOx in the exhaust stream.

In addition, all common fuels contain elemental nitrogen (N) or N_2 that is also oxidized in the combustion process. Natural gas contains very little nitrogen, while refined fuel oils, such as diesel, can contain significant concentrations of elemental nitrogen which can account for as much as half of the overall NOx emissions when standard fuel oils are burned. The emitted NOx that results from nitrogen in the fuel is known as “fuel NOx”.

NOx Controls

Because "thermal NOx" and "fuel NOx" are created through independent mechanisms, NOx emission controls may be designed to reduce thermal NOx formation, to reduce fuel NOx formation, or to reduce the concentration of previously-formed fuel and thermal NOx after it reaches the exhaust stream (post-combustion control).

The nitrogen content of pipeline natural gas is limited by federal Department of Energy standards (four percent by volume). The nitrogen content of diesel fuel, which is the only non-gaseous fuel in significant use in the Bay Area, is not explicitly limited by either state or federal standards. However, virtually all diesel fuel marketed in California since 2006 complies with "ultra low-sulfur diesel" (ULSD) standards that limit sulfur content to 15 ppmv by weight and the processes used to remove sulfur from diesel also remove nitrogen. This nitrogen removal is so effective that the amount of fuel NOx created in diesel fuel combustion may also be considered to be negligible compared to the amount of thermal NOx. Therefore, only thermal NOx controls are considered in the proposed amendments to Regulation 9-7.

Thermal NOx emissions can be reduced by lowering the average combustion temperature and by eliminating combustion "hot spots". "Low-NOx burners" achieve a lower average combustion temperature by creating a larger flame which dilutes the flame energy over a larger volume, or by performing combustion in more than one stage. In staged combustion, only partial combustion occurs in the first stage because either the oxygen or fuel concentration is restricted. The exhaust gases from the first stage proceed to subsequent stages where combustion is allowed to proceed by increasing the concentration of the restricted component (oxygen or fuel). The combustion temperature of the second and subsequent stages is reduced because some of the exhaust gases from the first stage are inert and will not burn. Low-NOx burners may also limit the amount of "excess air" used. Heaters normally operate with some degree of "excess air" beyond that which is theoretically required for complete fuel combustion in order to ensure that fuel is not wasted and to prevent uncontrolled detonation of unburned fuel outside of the combustion zone. However, the greater the amount of excess air, the more nitrogen and oxygen is available to form NOx. Limiting the level of excess air reduces the potential amount of NOx that can form, while improving combustion efficiency. Hot spots in the combustion zone may be minimized by thoroughly mixing fuel and combustion air upstream of the burner. Low-NOx burners, by themselves, will reduce NOx emissions by at least 10 percent and as much as 50 percent compared to basic burners, and typically will not reduce overall combustion efficiency. However, low-NOx burners usually create a longer flame, so some existing heaters may not have sufficient space to allow such a burner to be retro-fitted. If a retrofit is possible, the maximum firing capacity of the device may have to be reduced, possibly to an unacceptable level, to accommodate the longer flame. Burners that are capable of NOx concentrations of 15 ppmv or less are referred to as "ultra low-NOx burners".

"Flue gas recirculation" (FGR) reduces flame temperature by diverting some of the combustion exhaust gas back to the burner inlet, where it is mixed with the fuel and combustion air. The exhaust gas, while hot, is cooler than the combustion temperature, so the use of FGR reduces the average flame temperature. Also, the diverted flue gas will have a depleted oxygen content compared to ambient air, so will also lower the level of excess oxygen available to form NOx. FGR, by itself, will reduce NOx emissions by as much as 80 percent, but is most commonly used in conjunction with low-NOx burners. It is less likely that a given burner can be successfully retrofitted with FGR than with a low-NOx burner because an FGR system must not only be compatible with the burner assembly, but may also have significant space requirements for ductwork to return a portion of the exhaust to the combustion chamber and a blower. State-of-the-art ultra low-NOx burner systems have been able to incorporate an "induced FGR" technique, that draws firebox air directly into the nozzle and mixes it with the fuel, rather than draw from the stack. There is no need for external fans or ductwork with these systems.

A technique similar to FGR is the injection of water or steam into the combustion zone to lower combustion temperature. This technique can cause a significant loss of efficiency and is typically used only on the largest heaters in conjunction with low NOx burners. This was the first type of NOx control, now replaced by ultra low-NOx burners, that reach low NOx levels with dry air.

NOx emissions can also be reduced with add-on controls that convert previously-formed NOx to N_2 by reacting NOx with ammonia (NH_3), with or without the use of a catalyst. These post-combustion controls are SCR and SNCR systems. NOx catalysts operate well only in a narrow temperature band, so SCR systems are not used in "load-following" applications where a heater operates over a wide load range, which results in a wide temperature variation at the exhaust catalyst. SCR and SNCR systems can be costly to design, install and operate. As previously shown in Table 1, only five of these systems have been installed on heaters subject to Regulation 9-7, and in each case these devices were subject to stringent best available control technology (BACT) requirements of Regulation 2. SCR and SNCR systems are used on a number of other combustion devices in the District, primarily gas turbines and large stationary internal combustion engines. They are also in use in petroleum refineries to control NOx from boilers and process heaters which are subject to a separate District rule, Regulation 9-10.

In general, compliance with the current NOx standards in Regulation 9-7 has been achieved with low-NOx burners or FGR, or both, for all categories of boilers except the largest, those over 75 MMBtu/hr.

CO Emissions and Controls

CO is produced by the incomplete oxidation of carbon in a fossil fuel to CO rather than to CO_2. Because the Air District is in attainment status with all state and federal ambient air quality standards for CO, Regulation 9-7 attempts to limit the concentration of CO in the exhaust stream of combustion processes to a reasonable level (400 ppmvv), but does not attempt to achieve further CO emission reductions. All other California air districts that

address CO emissions from combustion sources impose the same standard. In fact, new low-NOx burner designs minimize CO to far lower levels than 400 ppmvv.

The most common NOx control strategies, which limit NOx formation by limiting combustion temperature, tend to also limit complete oxidation of carbon to CO_2, thereby increasing the CO formation rate. In order to maintain CO emission levels below 400 ppmv, no control technology is required. Instead, the NOx control technology must be implemented in a way that does not result in an excessive CO formation rate.

Greenhouse Gas Emissions and Controls

Combustion of conventional hydrocarbon fuel results in the release of energy as bonds between carbon and hydrogen are broken and reformed with oxygen to create water vapor (H_2O) and the greenhouse gas carbon dioxide (CO_2). For example, when methane (CH_4), the primary constituent of natural gas, is burned, the reaction proceeds as follows:

$$CH_4 + 2(O_2) \rightarrow CO_2 + 2(H_2O)$$

Thus, CO_2 is not a pollutant that occurs in relatively low concentrations as a by-product of the combustion process; CO_2 is a necessary combustion product of any fuel containing carbon. Therefore, attempts to reduce emissions of greenhouse gases from combustion focus on increasing energy efficiency – consuming less fuel to provide the same useful energy output. The most efficient boilers generally operate at no more than 85 percent overall efficiency. In other words, only up to 85 percent of the heat value of the fuel that is consumed is transferred to the material that is being heated and the other 15 percent is released to the atmosphere as waste heat. Waste heat is released in three ways:

- as heat in the combustion exhaust which is released from the boiler stack,
- as radiant heat from the outside of the boiler because the boiler is not perfectly insulated,
- as heat in the liquid "blowdown" stream that is constantly drained from the boiler to prevent solids from concentrating inside the boiler and ultimately fouling the heat exchange surfaces.

The most significant of these factors is heat loss through the boiler stack. Stack losses may be minimized by minimizing the amount of excess air and therefore the amount of oxygen and nitrogen that is heated and released from the stack. As previously discussed under "NOx Controls", above, reducing excess air to the minimum level necessary for complete fuel combustion, with a reasonable safety margin, is a very effective way to control NOx emissions.

In addition, boiler efficiency may be improved by limiting liquid blowdown to the lowest necessary level, by improving boiler shell insulation, and by maintaining clean boiler internals to maximize heat transfer to the medium being heated rather than to the atmosphere through the boiler stack.

The proposed amendments reduce CO2 emissions.

POTENTIAL EMISSION REDUCTIONS

For heaters rated between 2 and 10 MMBtu/hr, an emission limit of 30 ppmv will be established. There are 311 of these devices permitted in the Air District, but the total number is unknown since most are not subject to permit requirements. District staff used various sources to estimate the total number of these small boilers, including commercial gas usage data, estimates from boiler service companies and a review of San Francisco's boiler database. Although there is no existing standard for the smallest size category in Regulation 9-7, an emission concentration of 78 ppmv would be typical for a heater of this size with no emission controls, based on U.S. EPA's AP-42 document.

For heaters rated between 5 and 20 MMBtu/hr, the NOx emission limit will be reduced from 30 ppmv to 15 ppmv. All heaters of 10 MMBtu/hr and greater require permits in the Air District if fired on gaseous fuel. Heaters fired on non-gaseous fuel or with dual-fuel capability require permits if they are at least 1 MMBtu/hr. There are 164 of these devices currently permitted.

The proposed amendments to Regulation 9-7 will reduce the NOx emission limit that is applicable to heaters rated from 20 MMBtu/hr up to 75 MMBtu/hr from 30 ppmv to 9 ppmv. There are currently 125 of these devices permitted.

Finally, Regulation 9-7 proposes to reduce the allowable NOx emission limit on the largest heaters, those over 75 MMBtu/hr, to 5 ppmv. There are seven of these devices.

Most heaters that will be subject to Regulation 9-7 (those rated between two and 20 MMBtu/hr) will have their existing emission concentration limit or existing average emission level reduced by about 50 percent, although some of the heaters in each size range will probably be exempt from the proposed concentration limits because of low annual fuel use. The largest heaters (rated over 20 MMBtu/hr) will have their existing emission concentration limit reduced by 70 percent, although the emission reductions may be less to the extent that these devices already operate at emission concentrations less than 30 ppmv. Load following devices will be limited to a NOx concentration of 15 ppmv, for units of 20 MMBtu/hr or larger.

Therefore, as a preliminary estimate, it appears that the proposal will reduce emissions by about 50 percent from the new heaters that will become subject to Regulation 9-7, and also reduce emissions from already-controlled heaters by an additional 50 percent. The emissions from newly regulated heaters would be reduced by about 1.36 ton/day, and the emissions from currently controlled heaters by about 1.75 ton/day, for a total of approximately 3.1 ton/day of NOx reduced.

Other Impacts – Greenhouse Gases

Carbon dioxide, the greenhouse gas emitted by heaters, will be reduced by the proposed amendments to Regulation 9-7. The requirements for heater insulation, inspections and tune-ups, and stack gas temperature limits will be reduced because these measures reduce fuel usage. Consequently, NOx emissions, proportional to the amount of fuel burned, will also be reduced.

AFFECTED AREA

The proposed rule amendments would apply to facilities under BAAQMD jurisdiction. The BAAQMD jurisdiction includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma counties (approximately 5,600 square miles). The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.

The facilities affected by the proposed rule amendments are located within the jurisdiction of the Bay Area Air Quality Management District (see Figure 1).

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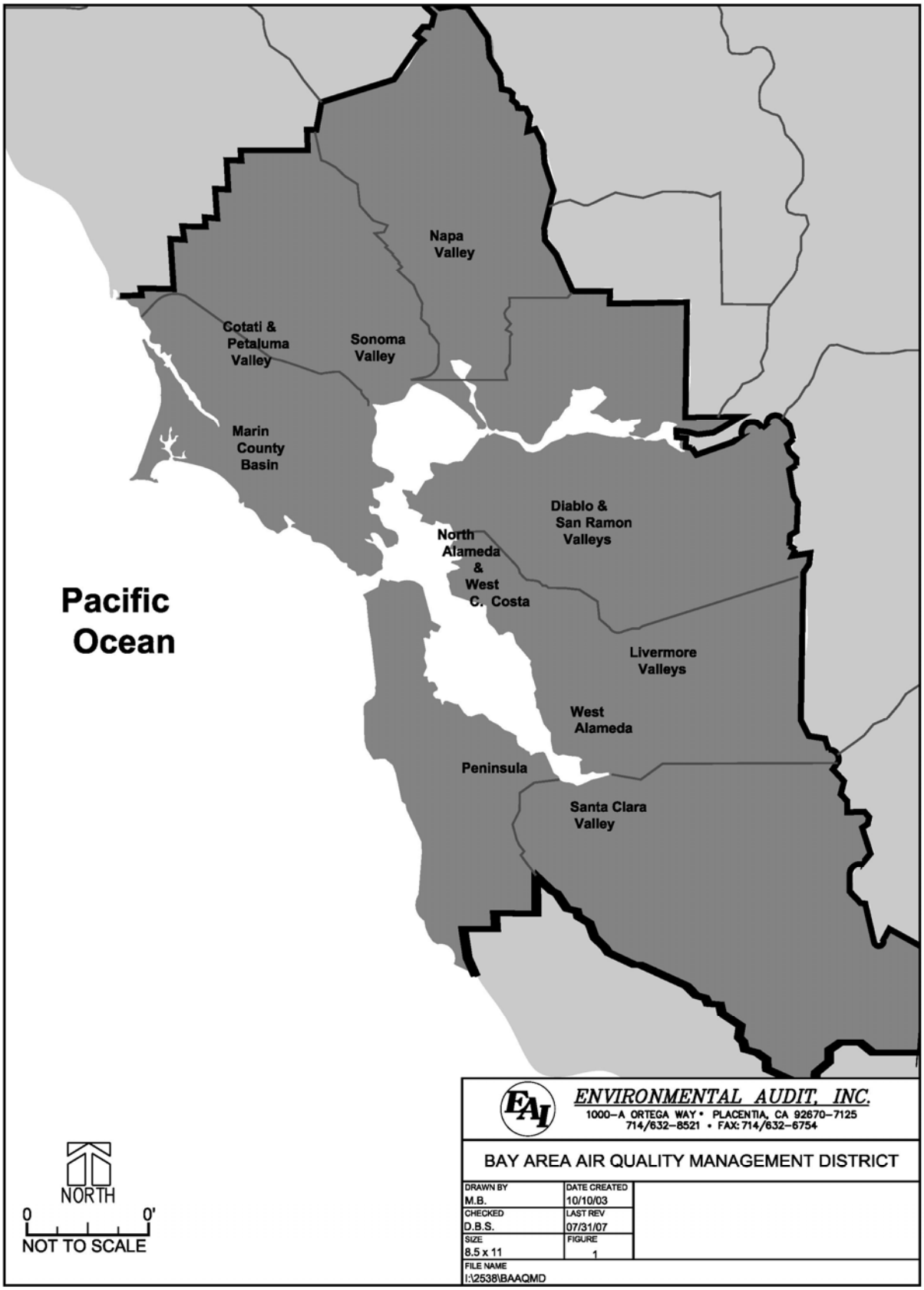
Napa Valley
Cotati & Petaluma Valley
Sonoma Valley
Marin County Basin
Diablo & San Ramon Valleys
North Alameda & West C. Costa
Pacific Ocean
Livermore Valleys
West Alameda
Peninsula
Santa Clara Valley
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NOT TO SCALE
ENVIRONMENTAL AUDIT, INC.
1000-A ORTEGA WAY • PLACENTIA, CA 92670-7125
714/632-8521 • FAX: 714/632-6754
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
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DATE CREATED 10/10/03
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LAST REV 07/31/07
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FIGURE 1
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Chapter 3

Environmental Checklist

ENVIRONMENTAL CHECKLIST FORM

1. Project Title:	Bay Area Air Quality Management District (BAAQMD) Proposed Amendments to Regulation 9, Rule7.
2. Lead Agency Name and Address:	Bay Area Air Quality Management District 939 Ellis Street San Francisco, California 94109
3. Contact Person and Phone Number:	Julian Elliot, Planning and Research Division 415/749-4705 or jelliot@baaqmd.gov
4. Project Location:	This rule amendment applies to the area within the jurisdiction of the Bay Area Air Quality Management District, which encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties.
5. Project Sponsor's Name and Address:	Bay Area Air Quality Management District 939 Ellis Street San Francisco, California 94109
6. General Plan Designation:	The rule amendments apply to boilers, steam generators, and process heaters that are used in industrial, institutional or commercial applications.
7. Zoning	The rule amendments apply to boilers, steam generators, and process heaters with a rated heat input greater than 2 mmBtu/hr excluding units used in petroleum refineries, by public electric utilities or qualifying small power production facilities, some waste heat recovery boilers, kilns, ovens, and furnaces for drying, baking, heat treating, cooking, calcining, or vitrifying which are generally found in industrial and commercial zones.
8. Description of Project	See "Background" in Chapter 2.
9. Surrounding Land Uses and Setting	See "Affected Area" in Chapter 2.
10. Other Public Agencies Whose Approval Is Required	None

Environmental Factors Potentially Affected:

The environmental factors checked below would potentially be affected by this Project (i.e., the project would involve one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	

Determination:

On the basis of this initial evaluation:

☑ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

_____ _____

Printed Name For

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than-Significant Impact	No Impact
I.	**AESTHETICS.**				
	Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☑
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d)	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses.

The proposed rule amendments affect heaters with a heat input of 2 mmBtu/hr or more. These types of heaters are most often found in industrial, institutional and commercial applications. Rule amendments for heaters are expected to be located in commercial or industrial areas throughout the Bay Area. Scenic highways or corridors are generally not located in the vicinity of commercial or industrial areas.

Regulatory Background

Visual resources are generally protected by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

I a-d. The proposed amendments to Regulation 9-7 would further reduce NOx emissions from natural gas-fired heaters in order to reduce ozone levels in the Bay Area and reduce transport of air pollutants to neighboring air basins. The proposed amendments are not expected to require the construction of any major new structures that would be visible to areas outside of the affected facilities, and are not expected to result in any adverse aesthetic impacts. Once completed, most of the modifications are not expected to be visible as they would involve new burners and or FGR which would not be visible to surrounding areas. Most of the heaters affected by the proposed rule amendments are expected to be located with industrial or commercial areas, which are not typically located in areas with scenic vistas. The proposed amendments to Regulation 9-7 are not expected to require substantial construction of any major new structures that would be visible to areas outside of the facilities, and are not expected to result in adverse aesthetic impacts. A few facilities (an estimated seven) may require new air pollution control equipment such as SCR or SNCR which could be visible to surrounding areas. Once completed, most of the modifications are not expected to be visible. Therefore, the installation of new equipment is not expected to generate significant adverse impacts on aesthetics. The proposed amendments to Regulation 9-7 would also not require any new sources of light or glare, since new equipment would largely replace existing equipment.

Based upon these considerations, no significant adverse aesthetic impacts are expected from the implementation of the amendments to Regulation 9-7.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES.				
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☐	☑
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Some of these agricultural lands are under Williamson Act contracts.

The areas with heaters affected by the proposed rule amendments are primarily located in industrial, institutional, or commercial areas throughout the Bay Area. Agricultural resources are generally not located in the vicinity of industrial, institutional or commercial areas.

Regulatory Background

Agricultural resources are generally protected by the City and/or County General Plans, Community Plans through land use and zoning requirements, as well as any applicable specific plans, ordinances, local coastal plans, and redevelopment plans.

Discussion of Impacts

II a-c. The proposed amendments to Regulation 9-7 would further reduce NOx emissions from natural gas-fired heaters in order to reduce ozone levels in the Bay Area and reduce transport of air pollutants to neighboring air basins. Most facilities are expected to comply with Regulation 9-7 by using either low NOx burners, flue gas recirculation, or both, thus reducing combustion temperatures which reduces the production of NOx. Some of the largest heaters would require SCR. The proposed amendment will require installation of new units which use these technologies and replacement of or retrofitting old units. These changes would be made within existing structures, or in new structures which are being built within approved parcels controlled by a General Plan. No development outside of existing facilities would be required by the proposed amendments to Regulation 9-7.

Based upon these considerations, no significant adverse impacts to agricultural resources are expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY				
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☐	☑
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☐	☑

Setting

Meteorological Conditions

The summer climate of the West Coast is dominated by a semi-permanent high centered over the northeastern Pacific Ocean. Because this high pressure cell is quite persistent, storms rarely affect the California coast during the summer. Thus the conditions that persist along the coast of California during summer are a northwest air flow and negligible precipitation. A thermal low pressure area from the Sonoran-Mojave Desert also causes air to flow onshore over the San Francisco Bay Area much of the summer.

In winter, the Pacific High weakens and shifts southward, upwelling ceases, and winter storms become frequent. Almost all of the Bay Area's annual precipitation takes place in the November through April period. During the winter rainy periods, inversions are weak or nonexistent, winds

are often moderate and air pollution potential is very low. During winter periods when the Pacific high becomes dominant, inversions become strong and often are surface based; winds are light and pollution potential is high. These periods are characterized by winds that flow out of the Central Valley into the Bay Area and often include tule fog.

Topography

The San Francisco Bay Area is characterized by complex terrain consisting of coastal mountain ranges, inland valleys, and bays. Elevations of 1,500 feet are common in the higher terrain of this area. Normal wind flow over the area becomes distorted in the lower elevations, especially when the wind velocity is not strong. This distortion is reduced when stronger winds and unstable air masses move over the areas. The distortion is greatest when low level inversions are present with the surface air, beneath the inversion, flowing independently of the air above the inversion.

Winds

In summer, the northwest winds to the west of the Pacific coastline are drawn into the interior through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately to the south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more nearly from the west as they stream through the Golden Gate. This channeling of the flow through the Golden Gate produces a jet that sweeps eastward but widens downstream producing southwest winds at Berkeley and northwest winds at San Jose; a branch curves eastward through the Carquinez Straits and into the Central Valley. Wind speeds may be locally strong in regions where air is channeled through a narrow opening such as the Carquinez Strait, the Golden Gate, or San Bruno Gap.

In winter, the Bay Area experiences periods of storminess and moderate-to-strong winds and periods of stagnation with very light winds. Winter stagnation episodes are characterized by outflow from the Central Valley, nighttime drainage flows in coastal valleys, weak onshore flows in the afternoon and otherwise light and variable winds.

Temperature

In summer, the distribution of temperature near the surface over the Bay Area is determined in large part by the effect of the differential heating between land and water surfaces. This process produces a large-scale gradient between the coast and the Central Valley as well as small-scale local gradients along the shorelines of the ocean and bays. The winter mean temperature high and lows reverse the summer relationship; daytime variations are small while mean minimum nighttime temperatures show large differences and strong gradients. The moderating effect of the ocean influences warmer minimums along the coast and penetrating the Bay. The coldest temperatures are in the sheltered valleys, implying strong radiation inversions and very limited vertical diffusion.

Inversions

A primary factor in air quality is the mixing depth, i.e., the vertical dimension available for dilution of contaminant sources near the ground. Over the Bay Area, the frequent occurrence of temperature inversions limits this mixing depth and consequently limits the availability of air for dilution. A temperature inversion may be described as a layer or layers of warmer air over cooler air.

Precipitation

The San Francisco Bay Area climate is characterized by moderately wet winters and dry summers. Winter rains (December through March) account for about 75 percent of the average annual rainfall; about 90 percent of the annual total rainfall is received in November to April period; and between June and September, normal rainfall is typically less than 0.10 inches. Annual precipitation amounts show greater differences in short distances. Annual totals exceed 40 inches in the mountains and are less than 15 inches in the sheltered valleys.

Pollution Potential

The Bay Area is subject to a combination of physiographic and climatic factors which result in a low potential for pollutant buildups near the coast and a high potential in sheltered inland valleys. In summer, areas with high average maximum temperatures tend to be sheltered inland valleys with abundant sunshine and light winds. Areas with low average maximum temperatures are exposed to the prevailing ocean breeze and experience frequent fog or stratus. Locations with warm summer days have a higher pollution potential than the cooler locations along the coast and bays.

In winter, pollution potential is related to the nighttime minimum temperature. Low minimum temperatures are associated with strong radiation inversions in inland valleys that are protected from the moderating influences of the ocean and bays. Conversely, coastal locations experience higher average nighttime temperatures, weaker inversions, stronger breezes and consequently less air pollution potential.

Air Quality

Criteria Pollutants

It is the responsibility of the BAAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns in diameter (PM10), particulate matter less than 2.5 microns in diameter (PM2.5), sulfur dioxide (SO_2) and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards. California has also established standards for sulfate, visibility, hydrogen sulfide, and vinyl chloride.

The state and national ambient air quality standards for each of these pollutants and their effects on health are summarized in Table 3-1. The BAAQMD monitors levels of various criteria pollutants at 24 monitoring stations. The 2006 air quality data from the BAAQMD's monitoring stations are presented in Table 3-2.

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. Ambient concentrations of air pollutants and the number of days on which the region exceeds air quality standards have fallen dramatically (see Table 3-3). The Air District is in attainment of the State and federal ambient air quality standards for CO, nitrogen oxides (NOx), and sulfur dioxides (SO_2). The Air District is not considered to be in attainment with the State PM10 and PM2.5 standards.

The 2006 air quality data from the BAAQMD monitoring stations are presented in Table 3-2. All monitoring stations were below the state standard and federal ambient air quality standards for CO, NO_2, and SO_2. The federal 8-hour ozone standard was exceeded 12 days in the District in 2006, while the state standard was exceeded on 22 days. The Bay Area is designated as a non-attainment area for the California 1-hour ozone standard. The State 1-hour ozone standard was exceeded on 18 days in 2006 in the District, most frequently in the Eastern District (Livermore) (see Table 3-2).

All monitoring stations were in compliance with the federal PM10 standards. The California PM10 standards were exceeded on 15 days in 2006, most frequently in San Jose. The Air District exceeded the federal PM2.5 standard on ten days, most frequently in San Jose, in 2006 (see Table 3-2).

TABLE 3-1

Federal and State Ambient Air Quality Standards

	STATE STANDARD	FEDERAL PRIMARY STANDARD	MOST RELEVANT EFFECTS
AIR POLLUTANT	CONCENTRATION/ AVERAGING TIME	CONCENTRATION/ AVERAGING TIME	
Ozone	0.09 ppm, 1-hr. avg. > 0.070 ppm, 8-hr	0.075 ppm, 8-hr avg. >	(a) Short-term exposures: (1) Pulmonary function decrements and localized lung edema in humans and animals (2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; (d) Property damage
Carbon Monoxide	9.0 ppm, 8-hr avg. > 20 ppm, 1-hr avg. >	9 ppm, 8-hr avg.> 35 ppm, 1-hr avg.>	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses
Nitrogen Dioxide	0.25 ppm, 1-hr avg. >	0.053 ppm, ann. avg.>	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration
Sulfur Dioxide	0.04 ppm, 24-hr avg.> 0.25 ppm, 1-hr. avg. >	0.03 ppm, ann. avg.> 0.14 ppm, 24-hr avg.>	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
Suspended Particulate Matter (PM10)	20 µg/m^3, annarithmetic mean > 50 µg/m^3, 24-hr average>	50 µg/m^3, annual arithmetic mean > 150 µg/m^3, 24-hr avg.>	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; (b) Excess seasonal declines in pulmonary function, especially in children
Suspended Particulate Matter (PM2.5)	12 µg/m^3, annual arithmetic mean>	15 µg/m^3, annual arithmetic mean> 35 µg/m^3, 24-hour average>	Decreased lung function from exposures and exacerbation of symptoms in sensitive patients with respiratory disease; elderly; children.
Sulfates	25 µg/m^3, 24-hr avg. >=		(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) Property damage
Lead	1.5 µg/m^3, 30-day avg. >=	1.5 µg/m^3, calendar quarter>	(a) Increased body burden; (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	In sufficient amount to give an extinction coefficient >0.23 inverse kilometers (visual range to less than 10 miles) with relative humidity less than 70%, 8-hour average (10am – 6pm PST)		Nephelometry and AISI Tape Sampler; instrumental measurement on days when relative humidity is less than 70 percent

TABLE 3-2
Bay Area Air Polution Summary - 2006

MONITORING STATIONS	OZONE						CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE			PM $_{10}$				PM $_{2.5}$				
	Max 1-hr	Cal Days	Max 8-hr	Nat Days	Cal Days	3-Yr Avg	Max 1-hr	Max 8-hr	Nat/ Cal Days	Max 24-hr	Ann Avg	Nat/ Cal Days	Max 24-hr	Ann Avg	Nat/ Cal Days	Ann Avg	Max 24-hr	Nat Days	Cal Days	Max 24-hr	Nat Days	3-Yr Avg	Ann Avg	3-Yr Avg
North Counties	(ppb)						(ppm)			(ppb)			(ppb)			(μm^3)				(μm^3)				
Napa	96	1	72	0	2	60	3.5	2.8	0	3.5	11	0	-	-	-	21.9	52	0	1	-	-	-	-	-
San Rafael	89	0	58	0	0	50	2.6	1.5	0	2.6	14	0	-	-	-	18.1	68	0	1	-	-	-	-	-
Santa Rosa	77	0	58	0	0	47	2.4	1.7	0	2.4	11	0	-	-	-	18.8	90	0	2	59.0	1	28.7	9.2	8.3
Vallejo	80	0	69	0	0	57	3.7	2.9	0	3.7	12	0	4	1.0	0	19.8	50	0	0	42.2	1	35.6	9.8	10.2
Coast/Central Bay																								
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	6	1.6	0	-	-	-	-	-	-	-	-	-
San Francisco	53	0	46	0	0	45	2.7	2.1	0	107	16	0	6	1.3	0	22.9	61	0	3	54.3	3	30.9	9.7	9.7
San Pablo	61	0	50	0	0	48	2.5	1.4	0	55	13	0	5	1.6	0	21.3	62	0	2	-	-	-	-	-
Eastern District																								
Bethel Island	116	9	90	1	14	73	1.3	1.0	0	44	8	0	7	2.1	0	19.4	84	0	1	-	-	-	-	-
Concord	117	8	92	4	14	74	1.7	1.3	0	47	11	0	7	0.8	0	18.5	81	0	3	62.1	5	35.0	9.3	9.7
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	8	1.8	0	-	-	-	-	-	-	-	-	-
Fairfield	106	3	87	1	8	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livermore	127	13	101	5	15	80	3.3	1.8	0	64	14	0	-	-	-	21.8	69	0	3	50.8	3	33.5	9.8	9.7
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	7	1.9	0	-	-	-	-	-	-	-	-	-
Pittsburg	105	3	93	1	10	70	3.3	1.9	0	52	11	0	9	2.4	0	19.9	59	0	2	-	-	-	-	-
South Central Bay																								
Fremont	102	4	74	0	3	60	2.9	1.8	0	63	15	0	-	-	-	20.0	57	0	1	43.9	2	30.3	10.3	9.6
Hayward	101	2	71	0	1	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	85	0	63	0	0	53	5.5	2.4	0	69	14	0	-	-	-	19.8	70	0	2	75.3	1	29.4	9.6	9.2
San Leandro	88	0	66	0	0	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara Valley																								
Gilroy	120	4	101	2	8	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Los Gatos	116	7	87	4	11	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose Central	118	5	87	1	5	63	4.1	2.9	0	74	18	0	-	-	-	21.0	73	0	2	64.4	6	38.5	10.8	11.4
San Jose, Tully Rd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.0	106	0	13	30.6	0	-	-	-
San Martin	123	7	105	5	11	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunnyvale	106	3	78	0	1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Days over Standard		**18**		**12**	**22**				**0**			**0**			**0**			**0**	**15**		**10**			

(ppm) = parts per million, (pphm) = parts per hundred million, (ppb) = parts per billion

TABLE 3-3

Bay Area Air Quality Summary
Days over standards

YEAR	OZONE			CARBON MONOXIDE				NO_X	SULFUR DIOXIDE		PM10		PM2.5
	1-Hr		8-Hr	1-Hr		8-Hr		1-Hr	24-Hr		24-Hr*		24-Hr**
	Nat	Cal	Nat	Nat	Cal	Nat	Cal	Cal	Nat	Cal	Nat	Cal	Nat
1995	11	28	-	0	0	0	0	0	0	0	0	7	-
1996	8	34	-	0	0	0	0	0	0	0	0	3	-
1997	0	8	-	0	0	0	0	0	0	0	0	4	-
1998	8	29	16	0	0	0	0	0	0	0	0	5	-
1999	3	2	9	0	0	0	0	0	0	0	0	12	-
2000	3	12	4	0	0	0	0	0	0	0	0	7	1
2001	1	15	7	0	0	0	0	0	0	0	0	10	5
2002	2	16	7	0	0	0	0	0	0	0	0	6	5
2003	1	19	7	0	0	0	0	0	0	0	0	6	0
2004	0	7	0	0	0	0	0	0	0	0	0	7	1
2005	0	9	1	0	0	0	0	0	0	0	0	6	0
2006	0	18	12	0	0	0	0	0	0	0	0	15	10

* PM10 is sampled every sixth day – actual days over standard can be estimated to be six times the numbers listed.
** 2000 is the first full year for which the Air District measured PM2.5 levels.

Toxic Air Pollutants

Table 3-4 (BAAQMD, 2007) contains a summary of ambient air toxics monitoring data of TACs measured at monitoring stations in the Bay Area by the District in 2003.

Regulatory Background

Criteria Pollutants

At the federal level, the Clean Air Act (CAA) Amendments of 1990 give the U.S. EPA additional authority to require states to reduce emissions of ozone precursors and particulate matter in non-attainment areas. The amendments set attainment deadlines based on the severity of problems. At the state level, CARB has traditionally established state ambient air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. At a local level, California's air districts, including the BAAQMD, are responsible for overseeing stationary source emissions, approving permits, maintaining emission inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

TABLE 3-4

Summary of 2003 BAAQMD Ambient Air Toxics Monitoring Data

Compound	LOD (ppb)(1)	% of Samples < LOD(2)	Max. Conc. (ppb) (3)	Min. Conc. (ppb) (4)	Mean Conc. (ppb) (5)
Acetone	0.30	0	121.4	0.6	6.80
Benzene	0.10	1.78	2.4	0.5	0.401
1,3-butadiene	0.15	75.7	0.89	0.075	0.12
Carbon tetrachloride	0.01	0	0.16	0.09	0.108
Chloroform	0.02	62.5	1.47	0.01	0.024
Ethylbenzene	0.10	44.2	0.90	0.05	0.135
Ethylene dibromide	0.02	100	0.01	0.01	0.01
Ethylene dichloride	0.10	100	0.05	0.05	0.05
Methylene chloride	0.50	82.9	3.40	0.25	0.356
Methyl ethyl ketone	0.20	7.7	5.80	0.1	0.496
Metyl tert-butyl ether	0.30	32.9	4.80	0.15	0.532
Perchloroethylene	0.01	42.4	0.28	0.005	0.026
Toluene	0.10	0.2	6.0	0.05	1.062
1,1,1-Trichloroethane	0.05	72.3	2.47	0.025	0.084
Trichloroethylene	0.05	93.8	0.33	0.025	0.029
Trichlorofluoromethane	0.01	0	.046	0.18	0.266
1,1,2-trichlorotrifluoroethane	0.01	0	1.16	0.06	0.077
Vinyl chloride	0.30	100	0.15	0.15	0.15
m/p-xylene	0.10	2.8	3.40	0.05	0.535
o-xylene	0.10	27.9	1.30	0.05	0.186

NOTES: Table 3-4 summarizes the results of the BAAQMD gaseous toxic air contaminant monitoring network for the year 2003. These data represent monitoring results at 19 of the 20 separate sites at which samples were collected. Data from the Fort Cronkhite "clean-air" background site was not included. Data from the Oakland-Davie Stadium site was available from January through March.

(1) "LOD" is the limit of detection of the analytical method used.
(2) "% of samples < LOD" is the percent of the total number of air samples collected in 2003 that had pollutant concentrations less than the LOD.
(3) "Maximum Conc." is the highest daily concentration measured at any of the 19 monitoring sites.
(4) "Minimum Conc." is the lowest daily concentration measured at any of the 19 monitoring sites.
(5) "Mean Conc." is the arithmetic average of the air samples collected in 2003 at the 19 monitoring sites. In calculating the mean, samples with concentrations less than the LOD were assumed to be equal to one half the LOD concentration.

The BAAQMD is governed by a Board of Directors composed of publicly-elected officials apportioned according to the population of the represented counties in accordance with California Health and Safety Code section 40221. The Board has the authority to develop and enforce regulations for the control of air pollution within its jurisdiction. The BAAQMD is responsible for implementing emissions standards and other requirements of federal and state laws. It is also responsible for developing air quality planning documents required by both federal and state laws.

Toxic Air Contaminants

TACs are regulated in the District through federal, state, and local programs. At the federal level, TACs are regulated primarily under the authority of the CAA. Prior to the amendment of the CAA in 1990, source-specific National Emission Standards for Hazardous Air Pollutants (NESHAPs) were promulgated under Section 112 of the CAA for certain sources of radionuclides and Hazardous Air Pollutants (HAPs).

Title III of the 1990 CAA amendments requires U.S. EPA to promulgate NESHAPs on a specified schedule for certain categories of sources identified by U.S. EPA as emitting one or more of the 189 listed HAPs. Emission standards for major sources must require the maximum achievable control technology (MACT). MACT is defined as the maximum degree of emission reduction achievable considering cost and non-air quality health and environmental impacts and energy requirements. All NESHAPs were to be promulgated by the year 2000. Specific incremental progress in establishing standards must be made by the years 1992 (at least 40 source categories), 1994 (25 percent of the listed categories), 1997 (50 percent of remaining listed categories), and 2000 (remaining balance). The 1992 requirement was met; however, many of the four-year standards were not promulgated as scheduled. Promulgation of those standards has been rescheduled based on court ordered deadlines, or the aim to satisfy all Section 112 requirements in a timely manner.

Many of the sources of TACs that have been identified under the CAA are also subject to the California TAC regulatory programs. CARB developed three regulatory programs for the control of TACs. Each of the programs is discussed in the following subsections.

Control of TACs Under the TAC Identification and Control Program: California's TAC identification and control program, adopted in 1983 as Assembly Bill 1807 (AB 1807) (California Health and Safety Code §39662), is a two-step program in which substances are identified as TACs, and airborne toxic control measures (ATCMs) are adopted to control emissions from specific sources. Since adoption of the program, CARB has identified 18 TACs, and CARB adopted a regulation designating all 189 federal HAPs as TACs.

Control of TACs Under the Air Toxics "Hot Spots" Act: The Air Toxics Hot Spot Information and Assessment Act of 1987 (AB 2588) (California Health and Safety Code §39656) establishes a state-wide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with those emissions. Inventory reports must be updated every four years under current state law. The BAAQMD uses a maximum individual cancer risk of 10 in one million, or an ambient concentration above a non-cancer reference exposure level, as the threshold for notification.
Senate Bill (SB) 1731, enacted in 1992 (California Health and Safety Code §44390 et seq.), amended AB 2588 to include a requirement for facilities with significant risks to prepare and implement a risk reduction plan which will reduce the risk below a defined significant risk level within specified time limits. At a minimum, such facilities must, as quickly as feasible, reduce cancer risk levels that exceed 100 per one million. The BAAQMD adopted risk reduction requirements for perchloroethylene dry cleaners to fulfill the requirements of SB 1731.

Targeted Control of TACs Under the Community Air Risk Evaluation Program: In 2004, BAAQMD established the Community Air Risk Evaluation (CARE) program to identify locations with high emissions of toxic air contaminants (TAC) and high exposures of sensitive populations to TAC and to use this information to help establish policies to guide mitigation strategies that obtain the greatest health benefit from TAC emission reductions. For example, BAAQMD will use information derived from the CARE program to develop and implement targeted risk reduction programs, including grant and incentive programs,

community outreach efforts, collaboration with other governmental agencies, model ordinances, new regulations for stationary sources and indirect sources, and advocacy for additional legislation.

Discussion of Impacts

III a. Regulation 9-7 was adopted pursuant to the region's first plan prepared under the CCAA's ozone planning requirements, the Bay Area 1991 Clean Air Plan (CAP). The objectives of the proposed rule amendments are to implement Control Measure SS-12 from the Bay Area 2005 Ozone Strategy in order to help reduce NOx emissions from industrial, institutional, and commercial boilers, steam generators and process heaters and make Regulation 9-7 more stringent. Because the proposed amendments directly implement the control measure, the proposed amendments are in compliance with the local air quality plan and are expected to provide beneficial impacts associated with implementation of the local air quality plan

III b, c, d, and f. Regulation 9-7 was adopted pursuant to the regions's first plan prepared under the CCAA's ozone planning requirements, the Bay Area 1991 Clean Air Plan (CAP). Regulation 9-7 was adopted on September 16, 1992. Control Measure SS-12 in the Bay Area 2005 Ozone Strategy required the BAAQMD to determine if further reductions in NOx emissions from natural gas-fired heaters was feasible. Emissions from industrial, institutional, and commercial boilers, steam generators and process heaters include all the products of combustion. The primary concern with emissions from these boilers, steam generators and process heaters in the Bay Area is NOx. Industrial, institutional, and commercial boilers, steam generators and process heaters also produce CO, SOx, ROG, and PM10 emissions, but the contribution from boilers, steam generators and process heaters for each is relatively insignificant in the total emission inventory for the Bay Area, so no changes are being considered for pollutants other than NOx.

Combustion in industrial, institutional, and commercial boilers, steam generators and process heaters also produces CO2, a growing concern with respect to climate change. NOx is formed from combustion of nitrogen in the fuel (fuel NOx), but the primary source of NOx is from the oxidation of nitrogen in the air (thermal NOx).

NOx: The Bay Area is not yet in attainment of state ozone standards, so the region must implement all feasible measures to reduce the pollutants that form ozone (NOx and ROG). Control Measure SS-12 of the Air District's 2005 Ozone Strategy included consideration of amendments to Regulation 9, Rule 7: *Nitrogen Oxides and Carbon Monoxides from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters.* If adopted as proposed, Regulation 9-7 would regulate NOx emissions from all heaters boilers with heat ratings greater than 2 mmBtu/hr. The emissions from newly regulated heaters would be reduced by approximately 1.36 tons/day, and the emissions from currently controlled heaters by about 1.75 tons/day, for a total of approximately 3.1 tons/day of NOx reduced, providing an environmental benefit.

CO Emissions: CO is produced by the incomplete oxidation of carbon in a fossil fuel to CO rather than to carbon dioxide. Because the Air District is in attainment status with all state and federal ambient air quality standards for CO, Regulation 9-7 attempts to limit the concentration of CO in the exhaust stream of combustion processes to a reasonable level (400 ppmv), but does not attempt to achieve further CO emission reductions. All other California air districts that address CO emissions from combustion sources impose the same standard. The most common NOx control strategies, which limit NOx formation by limiting combustion temperature, tend to also limit complete oxidation of carbon to carbon dioxide, thereby increasing the CO formation rate. In order to maintain CO emission levels below 400 ppm, no control

technology is required. Instead, the NOx control technology must be implemented in a way that does not result in an excessive CO formation rate.

Greenhouse Gas Emissions: It is widely accepted that the accumulation of increasing amounts of greenhouse gases (GHG) in the Earth's atmosphere is a cause of global warming and may result in global climate change. Due to the complexity of conditions and interactions affecting global climate change, it is not possible to predict the specific impact, if any, attributable to GHG emissions associated with a single project. The proposed amendments to Regulation 9, Rule 7 would extend the rule to apply to certain classes of heaters currently not regulated in the District and would generally make the emission limits in the rule more stringent. The proposed amendments also include requirements to maximize energy efficiency among heaters that would be subject the rule. The net effect the proposed amendments would have on GHG emissions will depend upon the technologies applied to meet the new emissions limits and on the effect of the energy efficiency measures proposed in the rule. As explained below, the proposed amendments to Regulation 9, Rule 7 are not anticipated to result in an increase in emissions of GHG.

Combustion of conventional hydrocarbon fuel results in the release of energy as bonds between carbon and hydrogen are broken and reformed with oxygen to create water vapor and CO_2. CO_2 is not a pollutant that occurs in relatively low concentrations as a by-product of the combustion process; CO_2 is a necessary combustion product of any fuel containing carbon. Therefore, attempts to reduce emissions of greenhouse gases from combustion focus on increasing energy efficiency – consuming less fuel to provide the same useful energy output. Boilers generally operate at no more than 85 percent overall efficiency (i.e. only up to 85 percent of the heat value of the fuel that is consumed is transferred to the material that is being heated and the other 15 percent is released to the atmosphere as waste heat). Waste heat is released in three ways:

- as heat in the combustion exhaust which is released from the boiler stack;
- as radiant heat from the outside of the boiler because the boiler is not perfectly insulated;
- or as heat in the liquid "blowdown" stream that is constantly drained from the boiler to prevent solids from concentrating inside the boiler and ultimately fouling the heat exchange surfaces.

The most significant of these factors is heat loss through the boiler stack. Stack losses may be minimized by minimizing the amount of excess air and, therefore, the amount of oxygen and nitrogen that is heated and released from the stack. Reducing excess air to the minimum level necessary for complete fuel combustion, with a reasonable safety margin, is a very effective way to control NOx emissions. In addition, boiler efficiency may be improved by limiting liquid blowdown to the lowest necessary level, by improving boiler shell insulation, and by maintaining clean boiler internals to maximize heat transfer to the medium being heated rather than to the atmosphere through the boiler stack.

The proposed amendments include measures to maximize the energy efficiency of heaters that would be subject the rule. First, the proposed amendments include a requirement to install insulation on most heaters subject to the rule, with some safety related exceptions, such that exposed surfaces do not exceed 140 degrees Fahrenheit. In addition, the proposed amendments to Regulation 9-7 include an annual tune-up requirement for most heaters subject to the rule, effective in 2009. Finally, the proposed amendments require good heat transfer by setting maximum limits on stack gas temperatures, from 100 to 150 degrees Fahrenheit over the saturated steam or hot water temperature.

Apart from the energy efficiency measures described above, the proposed amendments would affect GHG emissions depending on the means used by heater operators to comply with the proposed emission

limitations. For the proposed NOx emission limits affecting heaters rated from 2 up to 20 MM BTU/hr, and for units rated 75 MM BTU/hr and above, a significant overall loss in efficiency is not expected. In fact, better air-fuel controls on heaters that are required to maintain low NOx levels will increase efficiency in most heaters affected by the proposed amendments.

For some heaters, installation of ultra low-NOx burners in conjunction with fuel-gas recirculation (FGR) may require that the maximum firing capacity of the heater be reduced or may result in an overall loss of efficiency. The heaters most likely to require both these technologies are in the 20 to 75 MM BTU/hr range. The proposed amendments would subject each heater in this range to a NOx emission limit of 9 ppmv, unless the heater is a load-following unit, as defined in the amendments. Under the proposed amendments, load-following units would be subject to a 15 ppmv NOx emission limit. Heaters subject to the proposed 9 ppmv NOx limit may install ultra low-NOx burners in conjunction with FGR, whereas heaters subject to a 15 ppmv limit would be unlikely to utilize FGR. In the District, there are 125 heaters rated between 20 to 75 MM BTU/hr, though many may be subject to the proposed 15 ppmv NOx emission limit rather than the 9 ppmv NOx emission limit because they are load-following units. The 20 to 75 MMBTU/hr heaters with ultra-low NOx burners and flue gas recirculation may require up to 40% of the flue gas to be re-circulated. However, one burner manufacturer states that, with state-of-the-art controls, no more than 15% of flue gas would need to be re-circulated to achieve NOx emissions lower than 9 ppmv.[1] Other boiler and burner manufacturers state that 9 ppmv can be achieved in new heater designs without loss of efficiency.[2][3] Finally, applications are being developed for combined heat and power units, wherein a microturbine provides combustion air and power to run elements of the NOx control system, resulting in an overall net energy decrease. One such system is slated for installation at Hitachi Systems in the Bay Area.[4] Re-circulation of 40% of the flue gas would result in about a 10% loss in overall heater efficiency. If all heaters in this size range were to suffer a 10% loss in efficiency, there would be an increase in CO_2 of 565 tons per day. Re-circulation of 15% of the flue gas would result in less than 5% loss in efficiency.

The energy efficiency measures in the proposed amendments will improve energy efficiency across the entire range of heaters, reducing greenhouse gases. The proposed energy efficiency measures are:

- Insulation requirements for all heaters, such that surfaces, including pipes and ducts, do not exceed 120°F, with some exceptions, to reduce heat loss to the atmosphere;
- Stack gas temperature limits, to ensure good heat transfer within the boiler; and
- Tune-up requirements, to maintain optimal air-fuel ratios.

Insulation can increase energy efficiency in a heater by up to 5%. Over time, insulation degrades, or is removed for heater repairs and servicing and not replaced. Some heaters have inadequate insulation and older heaters may never have been insulated. If all heaters were to be able to increase energy efficiency by 5%, CO_2 emissions would be decreased by 2781 tons per day. Hot stack gas temperatures is an indication of poor heat transfer within the heaters, either as a result of insufficient opportunity for the transference of heated air to water, steam or process fluid; or fouled or corroded heat transfer surfaces. In the first case, heater design is at fault; a replacement heater or the addition of an economizer will improve heat transfer. In

[1] Weideman, Dan, Demonstration of an Ultralow NOx Burner on a Firetube Boiler, ST Johnson Co., Jan.12, 2004, http://www.johnstonboiler.com/fir_burner.php
[2] Connor, S. "Low Emissions and High Efficiency, A Dichotomy?", Cleaver-Brooks, http://www.cbboilers.com/Emissions/Technical%20Articles/Efficiency,%20a%20dichotomy%20S%20Connor.pdf
[3] Delta-NOx Ultra Low NOx Burner Achieves 9 PPM, Coen Company, Inc. July 2005
[4] Castaldini, Carlo, CMC Engineering, telephone conversation and Industrial Technologies Program/Energy Efficiency and Renewable Energy, www1.eere.energy.gov/industry/bestpractices/pdfs/steam3_recoverypdf

the second, cleaning the heat transfer surfaces and maintaining an optimal liquid blowdown rate to keep the transfer surfaces clean will improve heat transfer and lower stack gas temperatures. As a rule of thumb, 1% in overall heater efficiency can be gained for every 40°F reduction in flue gas. Tune-up requirements can increase heater efficiency by up to 10% by optimizing air-fuel ratios. This also ensures that NOx emissions are not increasing beyond the proposed limits. A tune-up will also check blowdown rates, so that heat is not lost from overly frequent blowdowns. If all heaters in the smallest size range, 2 to 10 MM BTU/hr, could increase their efficiency by 10%, CO_2 emissions would be decreased by 4809 tons per day.

It is difficult to assess the overall greenhouse gas impacts of the energy efficiency measures, which reduce CO_2, and the proposed NOx limit for the 20 to 75 MM BTU/hr size category, which may increase CO_2. The reason for this difficulty is that the number of heaters that will opt for the ultra-low NOx burners in conjunction with high flue gas recirculation is unknown because a considerable number are expected to be load-following units, some may opt for SCR, which does not significantly reduce energy efficiency, and some may install advanced controls that may limit the amount of flue gas recirculation needed. Also, the number of heaters that will need insulation is unknown. Most heaters are installed with insulation, but, over time, insulation degrades, and repair or replacement of old insulation could be of considerable value. Finally, the number of heaters that do not now receive annual tune-ups, and thus would benefit from the tune-up requirement, is unknown.

It is likely that the reduction in greenhouse gases from energy efficiency measures, overall, far outweighs a possible increase in greenhouse gases from NOx control equipment in the 20 to 75 MM BTU/hr size category. Air district staff developed a spreadsheet to calculate overall increases or reductions in CO_2 from the proposed amendments based on numbers of heaters that would require insulation and tune-ups, and numbers in the 20 to 75 MM BTU/hr range that would suffer an energy efficiency loss. Staff used a 10% reduction in efficiency for the 20 to 75 MM BTU/hr heaters, a 5% benefit from insulating heaters, and a 10% benefit from tune-ups to heaters. For the purposes of the calculations, staff only input benefit from tune-ups to the smallest size heaters, those in the 2 to 10 MM BTU/hr range. These are the heaters most likely to be in institutional or commercial use, or in places like apartment buildings, office buildings and hotels. The large heaters tend to be in industrial use and staff assumed that, because fuel usages are so great, they would be more likely to be tuned up at least annually. PG&E estimates a 10% to 20% energy efficiency increase from tune-ups, so the 10% benefit used for the calculation is conservative. Also, a variety of sources estimates that insulation can improve a heater's efficiency by 5% to 10%. Five percent has been used for these calculations. All heaters were input at their reported fuel usages, as derived from assumptions made from the District's permitted heater database.

The calculations show that, if 90% of the heaters are already insulated with insulation that has not degraded due to age, and if 90% of the heaters in the smallest size range already have annual tune-ups (as noted above, the calculations assume all larger heaters are tuned up annually), and all the 20 to 75 MM BTU/hr heaters suffer a 10% energy efficiency loss, then there would still be a net CO_2 reduction of 194 tons per day. It is likely that the net reduction of greenhouse gases are much greater, for the reasons described below.

First, based on information gathered from boiler service companies in the District, it is unlikely that 90% of heaters in the District are adequately insulated. Rather, most heaters have had insulation degradation, as described above, so that the majority of heaters could benefit from upgrading insulation.

Second, it is also unlikely that 90% of all heaters have annual inspection and maintenance (tune-ups). Although heaters are inspected periodically for safety, and insurance companies require these inspections, air-fuel optimization is not necessarily a part of these inspections. Many operators in the commercial service sector will not tune-up to maximize efficiency routinely, although larger operators will. The District regularly inspects, and conducts source tests on, heaters rated equal to or greater than 10 MM BTU/hr. In the District's experience, larger units are more likely to be tuned up. However, the effectiveness of air-fuel controllers varies among heaters; generally, newer units equipped with digital controls can more precisely measure air/fuel mixtures, resulting in greater efficiency, than can mechanical controls typically found on older units.

It is probable that the assumption of a 10% energy efficiency reduction from all heaters in the 20 – 75 MM BTU/hr size range is an over-estimate because it is unlikely that all these heaters will suffer a 10% loss in efficiency. As discussed above, technology is available to reduce the energy efficiency loss in this size range. At current high energy costs, it is reasonable to assume that this technology would become more economically attractive. The proposed NOx limit could also be met with other technology, such as SCR. SCR, while generally more expensive than ultra-low NOx burners and FGR, does not significantly degrade efficiency. Finally, a number of heaters are likely load-following units, so would be subject to a less stringent standard.

Researchers are developing what are known as Super Boilers.[5] These devices, currently in the testing stage, have shown energy efficiencies of 94% and NOx emissions of less than 5 ppmv. These technologies should be available as the proposed amendments become mandatory. Operators who choose this technology could ultimately see cost savings over retrofitting and further reduce greenhouse gas emissions.

Table 3-5 shows a range of expected CO_2 reductions from various percentages of heaters that are able to gain energy efficiency if all the 20 to 70 MM BTU/hr heaters were to suffer a 10% energy efficiency loss.

Table 3-5

CO2 Reductions from Insulation and Small Boiler Tune-Ups Including Efficiency Loss, 20 – 75 MM BTU/hr Heaters, Tons/day

	Percentage of heaters that already get annual tune-ups		
Percent heaters already insulated	50% already get annual tune-ups	75% already get annual tune-ups	90% already get annual tune-ups
10% insulated	4342	3140	2418
25% insulated	3925	2723	2001
50% insulated	3230	2027	1306
75% insulated	2534	1332	611
90% insulated	2117	915	194

[5] US Department of Energy, Energy Efficiency and Renewable Energy, Super Boiler, First Generation, Ultra-High Efficiency Firetube Boiler, June, 2007, http://www1.eere.energy.gov/industry/combustion/pdfs/spperboiler.pdf

Finally, the proposed amendments to Regulation 9-7 are expected to require the addition of SCR on an estimated seven facilities with larger heaters. The energy requirements for the use of SCR units is limited to new air blowers, pumps, and a vaporization unit which have relatively small motors (about 100 horsepower) (SCAQMD, 2008 and SCAQMD, 2004). SCR units is only expected to be installed at seven industrial facilities that already use electricity and the increase in energy use at these facilities and related greenhouse gas emissions are expected to be negligible.

Therefore, the proposed energy efficiency requirements (insulation, stack gas temperature maxima and tune-ups of heaters) included as part of the amendments to Regulation 9-7 are expected to reduce greenhouse gas emissions to a greater extent than the minimal additional energy use associated with add-on control equipment is expected to increase energy usage.

Based on the above discussion, implementation of the proposed amendments to Regulation 9-7 is expected to result in overall reductions in NOx emissions and no increase in emissions of other air pollutants. The proposed rule amendments would not require increased firing of heaters, boilers and steam generators; therefore, no increases in VOC, PM10, SOx or greenhouse gas emissions are expected. The proposed rule amendment allows an operator to comply with the new standards, at least in part, through energy efficiency, therefore, incentives have been provided that may result in a reduction in emissions of other air pollutants. Based on the above, no significant adverse air quality impacts are expected due to implementation of the proposed rule amendments.

Secondary Particulate Emissions: Although most facilities are expected to comply with the proposed amendments to Regulation 9-7 through installation of low NOx burners and/or FGR, the use of SCR control equipment is also feasible to reduce control equipment to reduce NOx emissions has become a widespread method of complying with SCAQMD NOx control rules. SCR technology uses ammonia as a catalyst. The SCAQMD has reviewed SCR technology in a number of CEQA documents (e.g., Final EIR for Rule 1135, August 1989, SCH No. 88032315 and Final EIR for Rule 1134, August 1989, SCH No. 86121708). The SCAQMD has evaluated potential air quality impacts resulting from secondary particulate formation from ammonia slip emissions. The SCAQMD concluded in the CEQA documents identified above that secondary particulate formation from ammonia slip would not be considered a significant adverse air quality impact if ammonia slip is limited to 10 ppm or less.

Ammonia slip depends on a variety of factors including space velocity, ammonia to NOx molar ratio, temperature, and NOx inlet concentration. Better technology has allowed operators to control ammonia slip: (1) by ensuring adequate mixing of ammonia in the flue gas to maintain uniform ammonia injection; (2) maintaining the proper ammonia to NOx molar ratio; (3) decreasing the exhaust gas flow rate; (4) maintaining consistent exhaust velocity, and maintaining an optimal temperature regime (SCAQMD, 1990). The potential for secondary particulate emissions can be alleviated by limiting ammonia slip to no more than 10 ppm, which will minimize the potential for secondary particulate formation to less than significant. In addition, NOx reductions may also reduce ambient levels of fine particulate matter ($PM_{2.5}$) pollution, because a fraction of NOx emissions is ultimately converted to nitrate particles in the atmosphere. It is estimated that the reduction in NOX will reduce the formation of secondary particulate matter by 0.5 tons/day. The use of SCR to comply with the proposed amendments to Regulation 9-7 is expected to be limited to seven facilities so that limiting the ammonia slip to 10 ppm or less is expected to limit the potential for secondary particulate emission formation to less than significant, and will be more than offset by the reduction in secondary PM.

Based on the above discussion, implementation of the proposed amendments to Regulation 9-7 is expected to result in overall reductions in NOx and PM2.5 and no increase in emissions of GHG and other air pollutants. The proposed rule amendments would not require increased firing of heaters, boilers and steam generators; therefore, no increases in VOC, PM10, or SOx emissions are expected. Based on the above, no significant adverse air quality impacts are expected due to implementation of the proposed rule amendments.

III c. CEQA Guidelines indicate that cumulative impacts of a project shall be discussed when the project's incremental effect is cumulatively considerable, as defined in CEQA Guidelines §15065(c). The overall impact of the proposed amendment to the rules is a decrease in NOx emissions. Therefore, the cumulative air quality impacts of the proposed rule amendments are expected to be beneficial.

III d. Although most facilities are expected to comply with the proposed amendments to Regulation 9-7 through installation of low NOx burners and/or RFG, the use of SCR control equipment is also feasible to reduce control equipment to reduce NOx emissions has become a widespread method of complying with NOx control rules. SCR technology uses ammonia as a catalyst and can potentially generate ammonia emissions through ammonia slip. Ammonia is regulated as a toxic air contaminant. However, limiting ammonia slip to 10 ppm is expected to minimize the potential exposure to sensitive receptors so that no significant impacts associated with ammonia use is expected.

III e. The proposed project is not expected to result in an increase in odors. The proposed amendments to Regulation 9-7 propose improved technology for reducing NOx emissions from industrial, institutional, and commercial boilers, steam generators and process heaters. Affected facilities are expected to comply by replacing or retrofitting boilers, steam generators and process heaters with low-NOx technologies. While the new technology for boilers, steam generators and process heaters will produce less NOx, they will continue to be fueled with natural gas and LPG which will not lead to any change in odors produced during operation.

Odors associated with ammonia use in new SCR systems are expected to be minimal. Ammonia can have a strong odor; however, the proposed project is not expected to generate substantial ammonia emissions. Ammonia is generally stored in an enclosed pressurized tank, which prevents fugitive ammonia emissions. Ammonia emissions from the SCR unit stack (also referred to as ammonia slip) can be minimized through permit conditions. Since exhaust emissions are bouyant as a result of being heated, ammonia will disperse and ultimate ground level concentrations will be substantially lower than five ppm. Five ppm is below the odor threshold for ammonia of 20 ppm (OSHA, 2005). Potential odor impacts associated with the proposed amendments to Regulation 9-7 are not expected to be significant. Therefore, no significantly adverse incremental odor impacts are expected due to the proposed rule amendments.

The proposed project is not expected to result in an increase in odors. The proposed amendments to Regulation 9-7 propose improved technology for reducing NOx emissions from heaters. Industrial, institutional, or commercial facilities are expected to comply by upgrading existing equipment with low NOx emitting technology. New units to be installed will be in compliance with the emission standards adopted in the proposed amendment to Regulation 9-7. While the new technology for natural gas-fired heaters will produce less NOx, they will continue to be fueled with the natural gas which will not lead to any change in odors produced during operation. Potential odor impacts from the proposed project are not expected to be significant. Therefore, no significantly adverse incremental odor impacts are expected due to the proposed rule amendments.

Based upon these considerations, the implementation of the proposed rule amendments will provide considerable air quality benefits by reducing NOx emissions and subsequent formation of ozone and by reducing secondary particulate formation. Also, no increase in greenhouse gas emissions is anticipated.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. A wide variety of biological resources are located within the Bay Area.

The areas affected by the proposed rule amendments are located in the Bay Area-Delta Bioregion (as defined by the State's Natural Communities Conservation Program). This Bioregion is comprised of a variety of natural communities, which range from salt marshes to chaparral to oak woodland. The areas affected by the proposed rule amendments are located in industrial, institutional, or commercial areas throughout the Bay Area. The affected areas have been graded to develop various industrial, institutional, or commercial structures. Native vegetation, other than landscape vegetation, has generally been removed from areas to minimize safety and fire hazards. Any new development would fall under compliance with the City or County General Plans.

Regulatory Background

Biological resources are generally protected by the City and/or County General Plans through land use and zoning requirements which minimize or prohibit development in biologically sensitive areas. Biological resources are also protected by the California Department of Fish and Game, and the U.S. Fish and Wildlife Service. The U.S Fish and Wildlife Service and National Marine Fisheries Service oversee the federal Endangered Species Act. Development permits may be required from one or both of these agencies if development would impact rare or endangered species. The California Department of Fish and Game administers the California Endangered Species Act which prohibits impacting endangered and threatened species. The U.S. Army Corps of Engineers and the U.S. EPA regulate the discharge of dredge or fill material into waters of the United States, including wetlands.

Discussion of Impacts

IV a – f. No impacts on biological resources are anticipated from the proposed rule amendments which would apply to existing or newly constructed facilities with industrial, institutional, and commercial heaters. Existing heaters will be replaced or upgraded, and new facilities will install the designated equipment required by the proposed amendments to Regulation 9-7. The existing heaters are generally located in industrial and commercial areas, which do not usually include sensitive biological species. The areas have typically been graded and developed, and biological resources, with the exception of landscape species, have generally been removed. Construction activities associated with the proposed amendments to Regulation 9-7 are expected to be limited to the boundaries of existing development and no development outside of existing facilities is expected.

Based upon these considerations, no significant adverse impacts to biological resources are expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside a formal cemeteries?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural and open space uses. Cultural resources are defined as buildings, sites, structures, or objects which might have historical architectural, archaeological, cultural, or scientific importance.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for millennia given their abundant combination of littoral and oak woodland resources.

The areas with natural gas-fired heaters affected by the proposed rule amendments are primarily located in industrial, institutional, or commercial areas throughout the Bay Area. These sites have already been graded to develop industrial, institutional, or commercial facilities and are typically surrounded by uses of similar kind. Cultural resources are generally not located within these areas.

Regulatory Background

The State CEQA Guidelines define a significant cultural resource as a “resource listed or eligible for listing on the California Register of Historical Resources” (Public Resources Code Section 5024.1). A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource (State CEQA Guidelines Section 15064.5(b)). A substantial adverse change in the significance of a historical resource would result from an action that would demolish or adversely alter the

physical characteristics of the historical resource that convey its historical significance and that qualify the resource for inclusion in the California Register of Historical Resources or a local register or survey that meets the requirements of Public Resources Code Sections 50020.1(k) and 5024.1(g).

Discussion of Impacts

V a – d. No impacts on cultural resources are anticipated from the proposed rule amendments that would apply to industrial and commercial heaters. The heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial, institutional, or commercial facilities. New heaters are expected to be installed in similar areas, and would be compliant with the amendments of the proposed Regulation 9-7. The existing areas have been graded and developed. No new construction would be required outside of the existing facility boundaries due to the adoption of the proposed amendments to Regulation 9-7. Therefore, no significant adverse impacts to cultural resources are expected due to the proposed amendments to Regulation 9-7.

Based upon these considerations, no significant adverse impacts to cultural resources are expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☑
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
• Strong seismic groundshaking?	☐	☐	☐	☑
• Seismic–related ground failure, including liquefaction?	☐	☐	☐	☑
• Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The facilities affected by the proposed rule amendments are expected to be located primarily in residential and commercial areas throughout the Bay Area.

The affected areas with natural gas-fired heaters are located in the natural region of California known as the Coast Ranges geomorphic province. The province is characterized by a series of northwest trending ridges and valleys controlled by tectonic folding and faulting, examples of which include the Suisun Bay, East Bay Hills, Briones Hills, Vaca Mountains, Napa Valley, and Diablo Ranges.

Regional basement rocks consist of the highly deformed Great Valley Sequence, which include massive beds of sandstone inter-fingered with siltstone and shale. Unconsolidated alluvial deposits, artificial fill, and estuarine deposits, (including Bay Mud) underlie the low-lying region along the margins of the Carquinez Straight and Suisun Bay. The estuarine sediments found along the shorelines of Solano County are soft, water-saturated mud, peat and loose sands. The organic, soft, clay-rich sediments along the San Francisco and San Pablo Bays are referred to locally as Bay Mud and can present a variety of engineering challenges due to inherent low strength, compressibility and saturated conditions. Landslides in the region occur in weak, easily weathered bedrock on relatively steep slopes.

The San Francisco Bay Area is a seismically active region, which is situated on a plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included with this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along “active” faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). In the Bay area, these faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Seal Cove/San Gregorio and West Napa faults. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

Ground movement intensity during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geological material. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. Earthquake ground shaking may have secondary effects on certain foundation materials, including liquefaction, seismically induced settlement, and lateral spreading.

Regulatory Background

Construction is regulated by the local City or County building codes that provide requirements for construction, grading, excavations, use of fill, and foundation work including type of materials, design, procedures, etc. which are intended to limit the probability of occurrence and the severity of consequences from geological hazards. Necessary permits, plan checks, and inspections are generally required.

The City or County General Plan includes the Seismic Safety Element. The Element serves primarily to identify seismic hazards and their location in order that they may be taken into account in the planning of future development. The Uniform Building Code is the principle mechanism for protection against and relief from the danger of earthquakes and related events.

In addition, the Seismic Hazard Zone Mapping Act (Public Resources Code §§2690 – 2699.6) was passed by the California legislature in 1990 following the Loma Prieta earthquake. The Act required that the California Division of Mines and Geology (DMG) develop maps that identify the areas of the state that require site specific investigation for earthquake-triggered landslides and/or potential liquefaction prior to permitting most urban developments. The act directs cities, counties and state agencies to use the maps in their land use planning and permitting processes.

Local governments are responsible for implementing the requirements of the Seismic Hazards Mapping Act. The maps and guidelines are tools for local governments to use in establishing their land use management

policies and in developing ordinances and review procedures that will reduce losses from ground failure during future earthquakes.

Discussion of Impacts

VI a. The natural gas-fired heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial, institutional, or commercial facilities. New heaters are expected to be installed in similar areas, and would be compliant with the amendments of the proposed Regulation 9-7. No new construction activities would be required as a result of adopting the proposed amendments to Regulation 9-7, rather, old equipment would be required to be upgraded with newer technology to lower NOx emissions, while new equipment will meet the requirements of Regulation 9-7 upon installation. New industrial, institutional, or commercial structures must be designed to comply with the Uniform Building Code Zone 4 requirements. The local cities and counties are responsible for assuring that new constuction complies with the Uniform Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The Uniform Building Code bases seismic design on minimum lateral seismic forces ("ground shaking"). The Uniform Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site.

New industrial, institutional, or commercial development will install low NOx emitting equipment and will be required to obtain building permits, as applicable, for all new structures at any site. The issuance of building permits from the local agency will assure compliance with the Uniform Building Code requirements which include requirements for building within seismic hazard zones. No significant impacts from seismic hazards are expected since no new development is required due to implementation of the proposed amendments to Regulation 9-7.

VII b. The natural gas-fired heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial, institutional, or commercial facilities. New heaters are expected to be installed in similar areas, and would be compliant with the amendments of the proposed Regulation 9-7. The specified equipment will be upgraded with low NOx emitting equipment. No new construction activities would be required due to the adoption of Regulation 9-7. Therefore, the proposed amendments are not expected to result in substantial soil erosion or the loss of topsoil as no major construction activities would be required.

VII c – e. The natural gas-fired heaters that already exist and are located within the confines of existing industrial, institutional, or commercial facilities so no major construction activities are expected. Since the industrial, institutional, or commercial facilities already exist, no additional structures would be constructed on a geologic unit or soil that is unstable or that would become unstable, or potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Likewise, no structure would be constructed on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. Compliance with the Uniform Building Code would minimize the

impacts associated with existing geological hazards. Construction would not affect soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater. Therefore, no adverse significant impacts to geology and soils are expected due to the proposed amendments to Regulation 9-7.

Based upon these considerations, no significant geology and soils impacts are expected from the implementation of the proposed rule amendments.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☑	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
c)	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑	☐
d)	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e)	Be located within an airport land use plan or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f)	Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑

Setting

Many of the affected facilities handle and process large quantities of flammable, hazardous, and acutely hazardous materials. Accidents involving these substances can result in worker or public exposure to fire, heat, blast from an explosion, or airborne exposure to hazardous substances.

The potential hazards associated with handling such materials are a function of the materials being processed, processing systems, and procedures used to operate and maintain the facilities where they exist. The hazards that are likely to exist are identified by the physical and chemical properties of the materials being handled and their process conditions, including the following events.

- **Toxic gas clouds:** Toxic gas clouds are releases of volatile chemicals (e.g., anhydrous ammonia, chlorine, and hydrogen sulfide) that could form a cloud and migrate off-site, thus exposing individuals. "Worst-case" conditions tend to arise when very low wind speeds coincide with an accidental release, which can allow the chemicals to accumulate rather than disperse.

- **Torch fires (gas and liquefied gas releases), flash fires (liquefied gas releases), pool fires, and vapor cloud explosions (gas and liquefied gas releases):** The rupture of a storage tank or vessel containing a flammable gaseous material (like propane), without immediate ignition, can result in a vapor cloud explosion. The "worst-case" upset would be a release that produces a large aerosol cloud with flammable properties. If the flammable cloud does not ignite after dispersion, the cloud would simply dissipate. If the flammable cloud were to ignite during the release, a flash fire or vapor cloud explosion could occur. If the flammable cloud were to ignite immediately upon release, a torch fire would ensue.

- **Thermal Radiation:** Thermal radiation is the heat generated by a fire and the potential impacts associated with exposure. Exposure to thermal radiation would result in burns, the severity of which would depend on the intensity of the fire, the duration of exposure, and the distance of an individual to the fire.

- **Explosion/Overpressure:** Process vessels containing flammable explosive vapors and potential ignition sources are present at many types of industrial facilities. Explosions may occur if the flammable/explosive vapors came into contact with an ignition source. An explosion could cause impacts to individuals and structures in the area due to overpressure.

For all affected facilities, risks to the public are reduced if there is a buffer zone between industrial processes and residences or other sensitive land uses, or the prevailing wind blows away from residential areas and other sensitive land uses. The risks posed by operations at each facility are unique and determined by a variety of factors. The areas affected by the proposed amendments are typically located in industrial and commercial areas.

Regulatory Background

There are many federal and state rules and regulations that facilities handling hazardous materials must comply with which serve to minimize the potential impacts associated with hazards at these facilities.

Under the Occupational Safety and Health Administration (OSHA) regulations [29 Code of Federal Regulations (CFR) Part 1910], facilities which use, store, manufacture, handle, process, or move highly hazardous materials must prepare a fire prevention plan. In addition, 29 CFR Part 1910.119, Process Safety Management (PSM) of Highly Hazardous Chemicals, and Title 8 of the California Code of Regulations, General Industry Safety Order §5189, specify required prevention program elements to protect workers at facilities that handle toxic, flammable, reactive, or explosive materials.

Section 112 (r) of the Clean Air Act Amendments of 1990 [42 U.S.C. 7401 et. Seq.] and Article 2, Chapter 6.95 of the California Health and Safety Code require facilities that handle listed regulated substances to develop Risk Management Programs (RMPs) to prevent accidental releases of these substances, U.S. EPA regulations are set forth in 40 CFR Part 68. In California, the California Accidental Release Prevention (CalARP) Program regulation (CCR Title 19, Division 2, Chapter 4.5) was issued by the Governor's Office of Emergency Services (OES). RMPs consist of three main elements: a hazard assessment that includes off-site consequences analyses and a five-year accident history, a prevention program, and an emergency response program.

Affected facilities that store materials are required to have a Spill Prevention Control and Countermeasures (SPCC) Plan per the requirements of 40 Code of Federal Regulations, Section 112. The SPCC is designed to prevent spills from on-site facilities and includes requirements for secondary containment, provides emergency response procedures, establishes training requirements, and so forth.

The Hazardous Materials Transportation (HMT) Act is the federal legislation that regulates transportation of hazardous materials. The primary regulatory authorities are the U.S. Department of Transportation, the Federal Highway Administration, and the Federal Railroad Administration. The HMT Act requires that carriers report accidental releases of hazardous materials to the Department of Transportation at the earliest practical moment (49 CFR Subchapter C). The California Department of Transportation (Caltrans) sets standards for trucks in California. The regulations are enforced by the California Highway Patrol.

California Assembly Bill 2185 requires local agencies to regulate the storage and handling of hazardous materials and requires development of a plan to mitigate the release of hazardous materials. Businesses that handle any of the specified hazardous materials must submit to government agencies (i.e., fire departments), an inventory of the hazardous materials, an emergency response plan, and an employee training program. The information in the business plan can then be used in the event of an emergency to determine the appropriate response action, the need for public notification, and the need for evacuation.

Contra Costa County has adopted an industrial safety ordinance that addresses the human factors that lead to accidents. The ordinance requires stationary sources to develop a written human factors program that includes considers human factors as part of process hazards analyses, incident investigations, training, operating procedures, among others.

Discussion of Impacts

VII a - c. It is expected that the proposed amendments to Regulation 9-7 will lead to a reduction in NOx emissions from existing heaters at affected facilities thus reducing PM and NOx emissions. About seven facilities could choose to comply by installing SCR technology to reduce NOx emissions. SCRs use ammonia or urea to react with NOx, in the presence of a catalyst, to form nitrogen gas and water. In some SCR installations, anhydrous ammonia is used. Safety hazards related to the transport, storage and handling of ammonia exist. Ammonia is considered to be a hazardous chemical. Ammonia has acute and chronic non-cancer health effects and also contributes to ambient PM10 emissions under some circumstances. Facilities can use either aqueous ammonia or anhydrous ammonia, but city codes and planning agencies in the Bay Area generally require the use of aqueous ammonia. In addition, District permit conditions can also specify the use of aqueous ammonia.

Most affected facilities are expected to comply with the proposed amendments to Regulation 9-7 by installation of low NOx burners and/or FGR. However, a few facilities may comply with add on pollution control units, e.g., SCR. SCR units require ammonia to react with NOx emissions in the exhaust gases to reduce the NOx emissions. The EIR prepared for the 2005 Ozone Strategy evaluated the potential impacts of ammonia use. The main hazard associated with ammonia is associated with a release that generates a toxic cloud and those hazards are summarized below.

On-Site Release Scenario: The use of anhydrous ammonia involves greater risk than aqueous ammonia because it is stored and transported under pressure. In the event of a leak or rupture of a tank, anhydrous ammonia is released and vaporizes into the gaseous form, which is its normal state at atmospheric pressure and produces a toxic cloud. Aqueous ammonia is a liquid at ambient temperatures and gas is only produced when a liquid pool from a spill evaporates. Under current OES regulations implementing the CalARP requirements, aqueous ammonia is regulated under California Health and Safety Code Section 2770.1.

The proposed amendments may require the increased use and storage of ammonia, primarily in industrial/commercial zones. The use and storage of anhydrous ammonia would be expected to result in potentially significant hazard impacts as there is the potential for anhydrous ammonia to migrate off-site and expose individuals to concentrations of ammonia that could lead to adverse health impacts. Anhydrous ammonia would be expected to form a vapor cloud (since anhydrous ammonia is a gas at standard temperature and pressures) and migrate from the point of release. The number of people exposed and the distance that the cloud would travel would depend on the meteorological conditions present and the distance from the release. Depending on the location of the spill, a number of individuals could be exposed to high concentrations of ammonia resulting in potentially significant impacts. However, anhydrous ammonia is unlikely to be allowed by planning agency conditions, city codes or District permit conditions.

In the event of an aqueous ammonia release, the ammonia solution would have to pool and spread out over a flat surface in order to create sufficient evaporation to produce a significant vapor cloud. For a release from on-site vessels or storage tanks, spills would be released into a containment area, which would limit the surface area of the spill and the subsequent toxic emissions. The containment area would limit the potential pool size, minimizing the amount of spilled material that would evaporate, form a vapor cloud, and impact residences or other sensitive receptors (including schools) in the area of the spill. Significant hazard impacts associated with a release of aqueous ammonia would not be expected.

In addition, the following safety design and process standards generally apply to facilities that use and store ammonia:

- The California Code of Regulations, Title 8 – contains minimum requirements for equipment design.

- Industry Standards and Practices – codes for design of various equipment, including the American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), and National Fire Protection Association (NFPA).

- The Occupational Safety and Health Administration (OSHA) passed the Process Safety Management of Highly Hazardous Chemicals rule in 1992 (29 CFR 910.119). This rule was designed to address the prevention of catastrophic accidents at facilities handling hazardous substances, in excess of specific threshold amounts, through implementation of Process Safety Management (PSM) systems for protection

of workers. A major PSM requirement is the performance of process hazard analyses to identify potential process deviations and improved safeguards to prevent accidents.

- A federal EPA Risk Management Program (RMP) and more stringent state RMP program hve been developed. The RMP's contain hazard assessments of both worst-case and more credible accidental release scenarios, a five year accident history, an accident prevention program, and an emergency response program.

The standards noted above and other applicable design standards govern the design of mechanical equipment such as pressure vessels, tanks, pumps, piping, and compressors. Adherence to codes minimizes the potential for an ammonia release.

Transportation Release Scenario: Use and transport of anhydrous ammonia involves greater risk than aqueous ammonia because it is stored and transported under pressure. In the event of a leak or rupture of a tank, anhydrous ammonia is released and vaporizes into the gaseous form, which is its normal state at atmospheric temperature and pressure, and produces a toxic cloud. Aqueous ammonia is a liquid at ambient temperatures and pressure, and gas is only produced when a liquid pool from a spill evaporates. Deliveries of ammonia would be made to each facility by tanker truck via public roads. The maximum capacity of a tanker truck is about 150 barrels. Regulations for the transport of hazardous materials by public highway are described in 49 CFR 173 and 177. Nineteen percent aqueous ammonia is considered a hazardous material under 49 CFR 172.

Although trucking of ammonia and other hazardous materials is regulated for safety by the U.S. DOT, there is a possibility that a tanker truck could be involved in an accident spilling its contents. The factors that enter into accident statistics include distance traveled and type of vehicle or transportation system. Factors affecting automobiles and truck transportation accidents include the type of roadway, presence of road hazards, vehicle type, maintenance and physical condition, and driver training. A common reference frequently used in measuring risk of an accident is the number of accidents per million miles traveled. Complicating the assessment of risk is the fact that some accidents can cause significant damage without injury or fatality.

The actual occurrence of an accidental release of a hazardous material cannot be predicted. The location of an accident or whether sensitive populations would be present in the immediate vicinity also cannot be identified. In general, the shortest and most direct route that takes the least amount of time would have the least risk of an accident. Hazardous material transporters do not routinely avoid populated areas along their routes, although they generally use approved truck routes that take population densities and sensitive populations into account.

The hazards associated with the transport of regulated (CCR Title 19, Division 2, Chapter 4.5 or the CalARP requirements) hazardous materials, including ammonia, would include the potential exposure of numerous individuals in the event of an accident that would lead to a spill. Factors such as amount transported, wind speed, ambient temperatures, route traveled, distance to sensitive receptors are considered when determining the consequence of a hazardous material spill.

In the unlikely event that the tanker truck would rupture and release the entire 150 barrels of aqueous ammonia, the ammonia solution would have to pool and spread out over a flat surface in order to create

sufficient evaporation to produce a significant vapor cloud. For a road accident, the roads are usually graded and channeled to prevent water accumulation and a spill would be channeled to a low spot or drainage system, which would limit the surface area of the spill and the subsequent toxic emissions. Additionally, the roadside surfaces may not be paved and may absorb some of the spill. Without this pooling effect on an impervious surface, the spilled ammonia would not evaporate into a toxic cloud and impact residences or other sensitive receptors in the area of the spill. An accidental aqueous ammonia spill occurring during transport is, therefore, not expected to have significant impacts.

In the unlikely event that a tanker truck would rupture and release the entire contents of anhydrous ammonia, the ammonia would be expected to form a vapor cloud (since anhydrous ammonia is a gas at standard temperature and pressures) and migrate from the point of release. There are federal, State and local agencies with jurisdiction over hazardous materials and waste are responsible for ensuring that hazardous materials and waste handling activities are conducted in accordance with applicable laws and regulations. While compliance with these laws and regulations will minimize the chance of an accidental release of anhydrous ammonia, the potential will still exist that an unplanned release could occur. The number of people exposed and the distance that the cloud would travel would depend on the meteorological conditions present. Depending on the location of the spill, a number of individuals could be exposed to high concentrations of ammonia resulting in potentially significant impacts.

Conclusion: Based on the above evaluation and significance criteria, the hazard impacts associated with the use and transport of aqueous ammonia are less than significant. The hazard impacts associated with the use and transport of anhydrous ammonia are potentially significant, but can be mitigated by using aqueous ammonia. Further, the number of facilities expected to use SCR is limited to an estimated seven so no significant increase in the transport of ammonia is expected (about one truck per day). Therefore, the proposed amendments to Rule 9-7 are not expected to generate significant adverse hazard impacts because the increase in ammonia use within the Bay Area is relatively small and limited, and the numerous regulations that exist minimize the potential hazard impacts. Therefore, the impacts of the proposed project on hazards are expected to be less than significant.

VII d. No impacts on hazardous material sites are anticipated from the proposed rule amendments that would typically apply to existing industrial, institutional, or commercial operations. Some of the affected areas may be located on the hazardous materials sites list pursuant to Government Code Section 65962.5. However, the proposed rule amendments would have no affect on hazardous materials nor would the amendment create a significant hazard to the public or environment. Natural gas-fired heaters already exist and are located within the confines of industrial, institutional, or commercial facilities. The proposed rule amendments neither require, nor are likely to result in, activities that would affect hazardous materials or existing site contamination. Therefore, no significant adverse impacts on hazards are expected.

VII e – f. No impacts on airports or airport land use plans are anticipated from the proposed rule amendments, which would apply to natural gas-fired heaters. The natural gas-fired heaters that already exist are located within the confines industrial or commercial facilities. Once the proposed amendment is implemented, facilities would be expected to comply by replacing or retrofitting process heaters. These changes are expected to be made with the confines of the existing facilities. No development outside of existing facilities is expected to be required by the proposed amendments to Regulation 9-7. Therefore, no significant adverse impacts on an air port land use plan or on a private air strip are expected.

VII g. No impacts on emergency response plans are anticipated from the proposed rule amendments that would apply to existing industrial, institutional, or commercial facilities. The natural gas-fired heaters which already exist are located within the confines of existing industrial or commercial facilities. The proposed rule amendments neither require, nor are likely to result in, activities that would impact the emergency response plan, and new industrial, institutional, or commercial development would consider emergency response as part of the City/County General Plans prior to approval. Therefore, no significant adverse impacts on emergency response plans are expected.

VII h. No increase in hazards related to wildfires are anticipated from the proposed rule amendments. The natural gas-fired heaters affected by the proposed amendments that already exist are located within the confines of existing industrial or commercial facilities. No increase in exposure to wildfires will occur due to the proposed amendments to Regulation 9-7.

Based upon these considerations, no significant adverse hazards and hazardous materials impacts are expected from the implementation of the proposed rule amendments.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY. Would the project:					
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☑
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☐	☐	☑
d)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☐	☐	☑
e)	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☑
g)	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☑
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☑
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and affected environment vary substantially throughout the area and include commercial, industrial, residential, agricultural, and open space uses.

The industrial, institutional, or commercial facilities affected by the proposed rule amendments are located throughout the Bay Area. Affected areas are generally surrounded by other industrial, institutional, or commercial facilities. Reservoirs and drainage streams are located throughout the area and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the Bay Area.

The affected areas are located within the San Francisco Bay Area Hydrologic Basin. The primary regional groundwater water-bearing formations include the recent and Pleistocene (up to two million years old) alluvial deposits and the Pleistocene Huichica formation. Salinity within the unconfined alluvium appears to increase with depth to at least 300 feet. Water of the Huichica formation tends to be soft and relatively high in bicarbonate, although usable for domestic and irrigation needs.

Regulatory Background

The Federal Clean Water Act of 1972 primarily establishes regulations for pollutant discharges into surface waters in order to protect and maintain the quality and integrity of the nation’s waters. This Act requires industries that discharge wastewater to municipal sewer systems to meet pretreatment standards. The regulations authorize the U.S. EPA to set the pretreatment standards. The regulations also allow the local treatment plants to set more stringent wastewater discharge requirements, if necessary, to meet local conditions.

The 1987 amendments to the Clean Water Act enabled the U.S. EPA to regulate, under the National Pollutant Discharge Elimination System (NPDES) program, discharges from industries and large municipal sewer systems. The U.S. EPA set initial permit application requirements in 1990. The State of California, through the State Water Resources Control Board, has authority to issue NPDES permits, which meet U.S. EPA requirements, to specified industries.

The Porter-Cologne Water Quality Act is California's primary water quality control law. It implements the state's responsibilities under the Federal Clean Water Act but also establishes state wastewater discharge requirements. The RWQCB administers the state requirements as specified under the Porter-Cologne Water Quality Act, which include storm water discharge permits. The water quality in the Bay Area is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board.

In response to the Federal Act, the State Water Resources Control Board prepared two state-wide plans in 1991 and 1995 that address storm water runoff: the California Inland Surface Waters Plan and the California Enclosed Bays and Estuaries Plan, which have been updated in 2005 as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works.

San Francisco Bay, and its constituents parts, including Carquinez Strait and Suisun Bay, fall under this category.

The San Francisco Bay Basin Plan identifies the: (1) beneficial water uses that need to be protected; (2) the water quality objectives needed to protect the designated beneficial water uses; and (3) strategies and time schedules for achieving the water quality objectives. The beneficial uses of the Carquinez Strait that must be protected which include water contact and non-contact recreation, navigation, ocean commercial and sport fishing, wildlife habitat, estuarine habitat, fish spawning and migration, industrial process and service supply, and preservation of rare and endangered species. The Carquinez Strait and Suisun Bay are included on the 1998 California list as impaired water bodies due to the presence of chlordane, copper, DDT, diazinon, dieldrin, dioxin and furan compounds, mercury, nickel, PCBs, and selenium.

Discussion of Impacts

VIII a, f. No significant adverse impacts on hydrology/water quality resources are anticipated from the proposed rule amendments, which would apply primarily to existing industrial, institutional, or commercial facilities. The proposed rule amendments are not expected to require additional water use and no increase in wastewater discharge is expected. Therefore, no violation of any water quality standards or waste discharge requirements, and no decrease in water quality is expected from the proposed amendments to Regulation 9-7.

VIII b. The natural gas-fired heaters boilers affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial, institutional, or commercial facilities. As equipment is upgraded, and new equipment installed, low NOx emitting units will be in place. The 2005 Ozone Strategy addressed the impacts of control measures on water demand. The proposed amendments to Regulation 9-7 are not expected to require additional water use. The NOx control technologies (i.e., low NOx burners, FGR, and SCR equipment) does not require additional use of water. Therefore, the proposed amendments are not expected to deplete groundwater supplies or interfere with groundwater recharge. Therefore, no significant impacts on groundwater supplies are expected due to the proposed amendments to Regulation 9-7.

VIII c - f. Industrial and commercial facilities are expected to comply with the proposed amendments to Regulation 9-7 by upgrading or installing low NOx emitting natural gas-fired heaters. All affected equipment is primarily located in industrial or commercial areas, where storm water drainage has been controlled and no construction activities outside of the existing facilities are expected to be required. Therefore the proposed amendments are not expected to substantially alter the existing drainage or drainage patterns, result in erosion or siltation, alter the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Nor are the proposed amendments expected to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The proposed amendments are not expected to substantially degrade water quality. Therefore, no significant adverse impacts to storm water runoff are expected.

VIII g – i. The heaters affected by the proposed rule amendments are primarily located within industrial and commercial areas. No major construction activities outside the boundaries of existing facilities are expected due to the adoption of the proposed amendments to Regulation 9-7. Industrial and commercial facilities are generally located to avoid flood zone areas and other areas subject to flooding. The proposed amendments

are not expected to require additional construction activities, place any additional structures within 100-year flood zones, or other areas subject to flooding. Therefore, no significant adverse impacts due to flooding are expected.

VIII j. The industrial and commercial facilities affected by the proposed rule amendments are located within industrial and commercial areas. No major construction activities are expected outside of the boundaries of the existing facilities due to the adoption of the proposed amendments to Regulation 9-7. The proposed amendments are not expected to place any additional structures within areas subject to inundation by seiche, tsunami or mudflow. Therefore, no significant adverse impacts on hydrology/water due to seiche, tsunami or mudflow are expected.

Based upon these considerations, no significant adverse hydrology and water quality impacts are expected from the implementation of the proposed rule amendments.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	**LAND USE AND PLANNING.** Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☑
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The facilities affected by the proposed rule amendments are primarily located in residential and commercial areas throughout the Bay Area.

Regulatory Background

Land uses are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

IX a-c. The natural gas-fired heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial, institutional, or commercial facilities. Industrial, institutional, or commercial facilities are expected to comply with Regulation 9-7 by upgrading or installing low NOx emitting natural gas-fired heaters or NOx control equipment. These changes are expected to be made within the confines of existing facilities as it will generally require modifications to existing heaters or replacement of existing heaters. SCR may be required for compliance at a few facilities but is expected to be constructed within the confines of the existing facilities. No new construction outside of the confines of the existing facilities is expected to be required due to the adoption of the proposed amendments to Regulation 9-7.

Based upon these considerations, no significant adverse impacts to land use are expected due to the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The facilities affected by the proposed rule amendments are primarily located in residential and commercial areas throughout the Bay Area.

Regulatory Background

Mineral resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

X a-b. The natural gas-fired heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial and commercial facilities. New heaters and control equipment are expected to be installed in similar areas and within the confines of existing facilities. The proposed rule amendments are not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, no impacts on mineral resources are expected.

Based upon these considerations, significant mineral resource impacts are not expected from the implementation of the proposed rule amendments.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	**NOISE.** Would the project:				
a)	Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b)	Expose persons to or generate of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c)	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
d)	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
e)	Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f)	Be located within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The facilities affected by the proposed rule amendments are primarily located in industrial, institutional, or commercial areas throughout the Bay Area. A majority of the affected areas are surrounded by other industrial, institutional, or commercial facilities.

Regulatory Background

Noise issues related to construction and operation activities are addressed in local General Plan policies and local noise ordinance standards. The General Plan and noise ordinances generally establish allowable noise limits within different land uses including residential areas, other sensitive use areas (e.g., schools, churches, hospitals, and libraries), commercial areas, and industrial areas.

Discussion of Impacts

XI a-d. The natural gas-fired heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial and commercial facilities. The rule amendments impose limitations on the NOx emissions from this equipment. Compliance will be achieved by upgrading or installing low NOx emitting natural gas-fired heaters.

No new construction activities would be required due to the adoption of the proposed amendments to Regulation 9-7. No noise impacts associated with construction would result from adoption of the proposed rule. No increase in noise is expected due to operation of the low NOx emitting equipment. The technologies that are expected to be used to comply with the proposed rule amendment are not expected to result in an increase in noise. Therefore, no adverse significant impacts to noise are expected due to the proposed project.

XI a-d. Owners/operators of facilities affected by the proposed rule amendments would be required to replace, retrofit heaters with low NOx equipment or install pollution control devices. Modifications or changes associated with the implementation of the proposed amendments will take place at existing facilities that are located in industrial and commercial settings. The existing noise environment at each of the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. Construction activities for the proposed project may generate some noise associated with the use of construction equipment and construction-related traffic in the event that grading for the installation of new ammonia tanks and SCR unit, for example, is necessary. However, noise from the proposed project is not expected to produce noise in excess of current operations at each of the existing facilities. Depending on the air pollution control technology installed, replaced, or modified, the operations phase of the proposed project may add new sources of noise to the affected facility. Noise increases associated with SCR units are expected to be limited to small motors for air blowers and or pumps. However, it is expected that each facility affected will comply with all existing noise control laws or ordinances. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA (Cal/OSHA) have established noise standards to protect worker health. These potential noise increases are expected to be small, if at all, and thus less than significant.

XI. e-f. Though some of the facilities affected by the proposed project are located at sites within an airport land use plan, or within two miles of a public airport, the addition of new or modification of existing equipment would not expose people residing or working in the project area to the same degree of excessive noise levels associated with airplanes. All noise producing equipment must comply with local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. Based upon the above considerations, significant noise impacts are not expected from the implementation of the proposed project.

Based upon these considerations, significant noise impacts are not expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The areas affected by the proposed rule amendments are primarily located in residential and commercial areas throughout the Bay Area.

Regulatory Background

Population and housing growth and resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

XII. a. Minor construction activities associated with the proposed project at each affected facility are not expected to involve the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. The reason for this conclusion is that operators of affected facilities who need to perform any construction activities to comply with the proposed project can draw from the existing labor pool in the local Bay Area. Further, it is not expected that replacing existing equipment with new equipment or installing air pollution control equipment will require new employees during operation of the equipment. In the event that new employees are hired, it is expected that the number of new employees at any one facility would be small. Human population within the jurisdiction of the BAAQMD is anticipated to grow regardless of implementing the proposed project. As a result, the proposed project is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth in the district or population distribution.

XII b-c. Because the proposed project includes modifications and/or changes at existing facilities located in industrial and commercial settings, the proposed project is not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the Bay Area. Based upon these considerations, significant population and housing impacts are not expected from the implementation of the proposed project.

Based upon these considerations, significant population and housing impacts are not expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES. Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
Fire protection?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The areas affected by the proposed rule amendments are primarily located in industrial, institutional, or commercial areas throughout the Bay Area.

Given the large area covered by the BAAQMD, public services are provided by a wide variety of local agencies. Fire protection and police protection/law enforcement services within the BAAQMD are provided by various districts, organizations, and agencies. There are several school districts, private schools, and park departments within the BAAQMD. Public facilities within the BAAQMD are managed by different county, city, and special-use districts.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate public services are maintained within the local jurisdiction.

Discussion of Impacts

XIII a. Implementation of the proposed project by installing new or modifying existing add-on controls is anticipated to continue current operations at existing affected facilities. The proposed project may result in greater demand for ammonia, which will need to be transported to the affected facilities that install SCR and stored onsite prior to use. In the event of an accidental release fire departments are typically first responders

for control and clean-up and police may be need to be available to maintain perimeter boundaries. The proposed project is not expected to significantly affect fire or police departments because of the low probability of accidents during transport and the limited number of facilities that are expected to use SCR (about seven). Therefore, the proposed project is not expected to increase the need or demand for additional public services (e.g., fire departments, police departments, schools, parks, government, et cetera) above current levels.

As noted in the "Population and Housing" discussion above, the proposed project is not expected to induce population growth in any way because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any construction activities that may be necessary at affected facilities and operation of new or modified equipment is not expected to require additional employees. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

Based upon these considerations, significant public services impacts are not expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.?	☐	☐	☐	☑
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that there are numerous areas for recreational activities. The facilities areas affected by the proposed rule amendments are located in industrial and commercial areas throughout the Bay Area. Public recreational land uses are generally located adjacent to these areas.

Regulatory Background

Recreational areas are generally protected and regulated by the City and/or County General Plans at the local level through land use and zoning requirements. Some parks and recreation areas are designated and protected by state and federal regulations.

Discussion of Impacts

XIV a-b. As discussed under "Land Use" above, there are no provisions of the proposed project that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposed project. Further, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment because the proposed project is not expected to induce population growth. Therefore, no significant adverse impacts on recreation are expected.

Based upon these considerations, significant recreation impacts are not expected from the implementation of the proposed rule amendments.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. TRANSPORTATION/TRAFFIC. Would the project:					
a)	Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☐	☑	☐
b)	Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☑	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d)	Substantially increase hazards because of a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e)	Result in inadequate emergency access?	☐	☐	☐	☑
f)	Result in inadequate parking capacity?	☐	☐	☐	☑
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Transportation systems located within the Bay Area include railroads, airports, waterways, and highways. The Port of Oakland and three international airports in the area serve as hubs for commerce and transportation. The transportation infrastructure for vehicles and trucks in the Bay Area ranges from single lane roadways to multilane interstate highways. The Bay Area contains over 19,600 miles of local streets and roads, and over 1,400 miles of state highways. In addition, there are over 9,040 transit route miles of services including rapid rail, light rail, commuter, diesel and electric buses, cable cars, and ferries. The Bay Area also has an extensive local system of bicycle routes and pedestrian paths and sidewalks. At a regional level, the share of workers driving alone was about 68 percent in 2000. The portion of commuters that carpool was about 12.9 percent in 2000. About 3.2 percent of commuters walked to work

in 2000. In addition, other modes of travel (bicycle, motorcycle, etc.), account for 2.2 percent of commuters in 2000 (MTC, 2004). Cars, buses, and commercial vehicles travel about 143 million miles a day (2000) on the Bay Area Freeways and local roads. Transit serves about 1.7 million riders on the average weekday (MTC, 2004).

The region is served by numerous interstate and U.S. freeways. On the west side of San Francisco Bay, Interstate 280 and U.S. 101 run north-south. U.S. 101 continues north of San Francisco into Marin County. Interstates 880 and 660 run north-south on the east side of the Bay. Interstate 80 starts in San Francisco, crosses the Bay Bridge, and runs northeast toward Sacramento. Interstate 80 is a six-lane north-south freeway which connects Contra Costa County to Solano County via the Carquinez Bridge. State Routes 29 and 84, both highways that allow at-grade crossings in certain parts of the region, become freeways that run east-west, and cross the Bay. Interstate 580 starts in San Rafael, crosses the Richmond-San Rafael Bridge, joins with Interstate 80, runs through Oakland, and then runs eastward toward Livermore. From the Benicia-Martinez Bridge, Interstate 680 extends north to Interstate 80 in Cordelia. Caltrans constructed a second freeway bridge adjacent and east of the existing Benicia-Martinez Bridge. The new bridge consists of five northbound traffic lanes. The existing bridge was re-striped to accommodate four lanes for southbound traffic. Interstate 780 is a four lane, east-west freeway extending from the Benicia-Martinez Bridge west to I-80 in Vallejo.

Regulatory Background

Transportation planning is usually conducted at the state and county level. Planning for interstate highways is generally done by the California Department of Transportation.

Most local counties maintain a transportation agency that has the duties of transportation planning and administration of improvement projects within the county and implements the Transportation Improvement and Growth Management Program, and the congestion management plans (CMPs). The CMP identifies a system of state highways and regionally significant principal arterials and specifies level of service standards for those roadways.

Discussion of Impacts

XV a-b. Construction activities resulting from implementing the proposed amendments to Regulation 9-7 may generate a slight, although temporary, increase in traffic in the areas of each affected facility associated with construction workers, construction equipment, and the delivery of construction materials. However, the proposed project is not expected to cause a significant increase in traffic relative to the existing traffic load and capacity of the street systems surrounding the affected facilities. Also, the proposed project is not expected to exceed, either individually or cumulatively, the current level of service of the areas surrounding the affected facilities. The work force at each affected facility is not expected to significantly increase as a result of the proposed project and operation-related traffic is expected to be minimal. Thus, the traffic impacts associated with the proposed rule amendments are expected to be less than significant.

XV c. Though some of the facilities that will affected by the proposed project may be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, actions that would be taken to comply with the proposed project, such as installing new air pollution control equipment, are not expected to significantly influence or affect air traffic patterns. Further,

the size and type of air pollution control devices that would be installed would not be expected to affect navigable air space. Thus, the proposed project would not result in a change in air traffic patterns including an increase in traffic levels or a change in location that results in substantial safety risks.

XV d - e. The siting of each affected facility is expected to be consistent with surrounding land uses and traffic/circulation in the surrounding areas of the affected facilities. Thus, the proposed project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facilities. Aside from the temporary effects due to a slight increase in truck traffic for those facilities that will undergo construction activities during installation or modification of air pollution control equipment, the proposed project is not expected to alter the existing long-term circulation patterns. The proposed project is not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system are expected to occur. The proposed project does not involve construction of any roadways, so there would be no increase in roadway design feature that could increase traffic hazards. Emergency access at each affected facility is not expected to be impacted by the proposed project. Further, each affected facility is expected to continue to maintain their existing emergency access gates and will not be impacted by the proposed rule amendments.

XV f. Each affected facility will be required to provide parking for the construction workers, as applicable, either on or within close proximity to each facility. No additional parking will be needed after completion of the construction phase because the work force at each facility is not expected to significantly increase as a result of the proposed project. Therefore, the proposed rule amendments will not result in significant adverse impacts on parking.

XV g. Construction and operation activities resulting from the proposed project are not expected to conflict with policies supporting alternative transportation since the proposed project does not involve or affect alternative transportation modes (e.g. bicycles or buses) because the construction and operation activities related to the proposed project will occur solely in existing industrial, commercial, and institutional areas.

Based upon these considerations, significant transportation/traffic impacts are not expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than-Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements needed?	☐	☐	☐	☑
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area.

Given the large area covered by the BAAQMD, public utilities are provided by a wide variety of local agencies. The most affected facilities have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of NPDES permits.

Water is supplied to affected facilities by several water purveyors in the Bay Area. Solid waste is handled through a variety of municipalities, through recycling activities and at disposal sites.

There are no hazardous waste disposal sites within the jurisdiction of the BAAQMD. Hazardous waste generated at area facilities, which is not reused on-site, or recycled off-site, is disposed of at a licensed in-state hazardous waste disposal facility. Two such facilities are the Chemical Waste Management Inc. (CWMI) Kettleman Hills facility in King's County, and the Safety-Kleen facility in Buttonwillow (Kern County). Hazardous waste can also be transported to permitted facilities outside of California. The nearest out-of-state landfills are U.S. Ecology, Inc., located in Beatty, Nevada; USPCI, Inc., in Murray, Utah; and Envirosafe Services of Idaho, Inc., in Mountain Home, Idaho. Incineration is provided at the following out-of-state facilities: Aptus, located in Aragonite, Utah and Coffeyville, Kansas; Rollins Environmental Services, Inc., located in Deer Park, Texas and Baton Rouge, Louisiana; Chemical Waste Management, Inc., in Port Arthur, Texas; and Waste Research & Reclamation Co., Eau Claire, Wisconsin.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate utilities and service systems are maintain within the local jurisdiction.

Discussion of Impacts

XVI a, b, d and e. The natural gas-fired heaters affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial, institutional, or commercial facilities. New heaters are expected to be installed in similar areas, and would be compliant with the amendments of the proposed Regulation 9-7. The proposed rule amendments are not expected to generate additional wastewater generated by the affected industrial, institutional, or commercial facilities. Additionally, no increase in water consumption would be associated with NOx control equipment. Therefore, no impacts on wastewater treatment requirements or wastewater treatment facilities is expected.

XVI c. Industrial, institutional, or commercial facilities are expected to comply by installing NOx control equipment. Construction activities would involve replacing existing heaters or installing air pollution control equipment within the confines of existing facilities. Therefore, the proposed amendments are not expected to alter the existing drainage or require the construction of new storm water drainage facilities. Nor are the proposed amendments expected to create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts on storm drainage facilities are expected.

XVI f and g. The proposed rule amendments would not affected the ability of industrial and commercial facilities to comply with federal, state, and local statutes and regulations related to solid waste. No significant impacts on waste generation are expected from the proposed rule amendments, since the proposed amendments would retrofit or replace equipment over a number of years. Waste is expected to be limited to metal, in the event that old equipment is replaced with new equipment. Metals are usually recycled so no significant impact to land disposal facilities would be expected.

The proposed project modifications may generate hazardous waste from spent catalyst in the SCR unit. The catalyst has a life expectancy ranging from about five to ten years, depending on the catalyst reaction rate. Spent catalysts are expected to be recycled offsite for their heavy metal content. Therefore, no significant impacts to hazardous waste disposal facilities are expected due to the proposed rule amendments. Facilities are expected to continue to comply with all applicable federal, state, and local statutes and regulations related to solid and hazardous wastes.

Based upon these considerations, significant impacts to utilities and service systems are not expected from the implementation of the proposed rule amendments.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☐	☑
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

Discussion of Impacts

XVII a. The proposed rule amendments do not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory, as discussed in the previous sections of the CEQA checklist. The proposed rule amendments are expected to result in emission reductions from industrial and commercial facilities with heaters , thus providing a beneficial air quality impact and improvement in air quality. As discussed in Section IV, Biological Resources and Section V, Cultural Resources, no significant adverse impacts are expected to biological or cultural resources.

XVII b-c. The proposed amendments are expected to result in emission reductions of NOx from affected industrial and commercial facilities with heaters, thus providing a beneficial air quality impact and improvement in air quality. The proposed rule amendments are part of a long-term plan to bring the Bay Area into compliance with the state ambient air quality standards for ozone, thus reducing the potential health impacts due to ozone exposure. The proposed rule amendments do not have adverse environmental impacts that are limited individually, but cumulatively considerable when considered in conjunction with other regulatory control projects. The proposed rule amendments are not expected to have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. No significant adverse environmental impacts are expected.

Chapter 4

References

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AGENDA: 12

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Tom Bates and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 18, 2011

Re: The Legal Framework for the Air District – How Do We Clean The Air?

RECOMMENDED ACTION:

None; receive and file.

BACKGROUND

Chairperson Bates requested that staff provide a number of informational presentations throughout the year describing various operations and duties of the Air District. This will be the second presentation in this series, providing a foundation for future discussions.

DISCUSSION

Staff will discuss the legal framework in which the Air District operates and the legal authorities granted and obligations imposed by that framework.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian C. Bunger