BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS' REGULAR MEETING

April 15, 2009

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.

BOARD OF DIRECTORS' REGULAR MEETING
A G E N D A

WEDNESDAY **BOARD ROOM**
APRIL 15, 2009 **7TH FLOOR**
9:45 A.M.

CALL TO ORDER

Opening Comments — Chairperson, Pamela Torliatt
Roll Call — Clerk of the Boards
Pledge of Allegiance

PUBLIC COMMENT PERIOD

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

CONSENT CALENDAR (ITEMS 1 – 6)

Staff/Phone (415) 749-

1. Minutes of April 1, 2009 — **L. Harper/5073** lharper@baaqmd.gov

2. Communications — **J. Broadbent/5052** jbroadbent@baaqmd.gov

   Information only.

3. Quarterly Report of Air Resource Board Representative - Honorable Ken Yeager — **J. Broadbent/5052** jbroadbent@baaqmd.gov

4. Quarterly Report of the Executive Office Activities — **J. Broadbent/5052** jbroadbent@baaqmd.gov

5. Set Final Public Hearing for May 20, 2009 to Consider Adoption of Proposed Fee Amendments to District Regulation 3: Fees, and Consider Approval of a Notice of Exemption from CEQA — **J. Broadbent/5052** jbroadbent@baaqmd.gov

   Proposed amendments to District Regulation 3: Fees, will help the Air District recover a greater share of the costs incurred to implement and enforce regulatory programs for stationary sources. Under California Health and Safety Code 41512.5, certain fee schedules require an initial public hearing to be held at least 30 days prior to the date at which adoption or revision of the fee schedules will be considered by the district board. The first public hearing to receive testimony on proposed amendments to the District's fee regulation will be held on April 15, 2009. A final public hearing to consider adoption of the amendments will be held on May 20, 2009.

6. Set Public Hearings for May 20, 2009 to Consider Testimony and June 3, 2009 to Consider Adoption of the Air District's Proposed Budget for FYE 2010

J. Broadbent/5052
jbroadbent@baaqmd.gov

Pursuant to Health and Safety code Section 40131, the Air District is setting a public hearing for May 20, 2009 for the exclusive purpose of considering testimony on the Air District's Proposed Budget for FYE 2010 and a final public hearing on June 3, 2009, to adopt the Air District's Proposed Budget for FYE 2010.

COMMITTEE REPORTS AND RECOMMENDATIONS

7. Report of the **Public Outreach Committee Meeting** of April 2, 2009

CHAIR: M. ROSS

J. Broadbent/5052
jbroadbent@baaqmd.gov

Action(s): The Committee recommends Board of Directors' approval of the following contractors and approval for the Executive Officer/APCO to execute contracts:

- *Advertising Services – O'Rorke Inc.*
  Summer Spare the Air -- $600,000
  Winter Spare the Air -- $600,000
  Not to exceed $1,200,000

- *Advertising Services – RHDG*
  Smoking Vehicles -- $275,000
  Grants & Incentives -- $200,000
  Not to exceed $475,000

- *Media/Public Relations Services – MS&L Public Relations*
  Summer Spare the Air--$250,000
  Winter Spare the Air -- $250,000
  Not to exceed $500,000

- *Media/Public Relations Services – Allison & Partners*
  Employer Program -- $150,000
  Not to exceed $150,000

PUBLIC HEARING(S)

8. Public Hearing to consider adoption of proposed amendments to Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles and Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles, and adoption of a CEQA Negative Declaration

H. Hilken/4642
hhilken@baaqmd.gov

Proposed amendments to Regulation 8, Rules 33 and 39 implement the District's 2005 Ozone Strategy Control Measure SS-7. The proposed amendments would reduce emissions from gasoline transfer at bulk terminals and bulk plants, including episodic emissions, by requiring monitoring systems in bulk terminals and improving operating practices in terminals and plants.

9. Public Hearing to Consider Testimony on Proposed Amendments to Air District Regulation 3: Fees **B. Bateman/4653**
bbateman@baaqmd.gov

The Board of Directors will consider testimony on proposed amendments to District Regulation 3: Fees. Final public hearing and adoption of proposed amendments is set for May 20, 2009.

PRESENTATION

10. Advisory Council Report and Recommendations from the February 11, 2009 Meeting on Air Quality and Public Health **J. Broadbent/5052**
jbroadbent@baaqmd.gov

The Advisory Council will present a report and recommendations from its February 11, 2009 meeting on Air Quality and Public Health.

OTHER BUSINESS

11. Report of the Executive Officer/APCO

12. Chairperson's Report

13. 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)

14. Time and Place of Next Meeting – 9:45 a.m., Wednesday, May 6, 2009 - 939 Ellis Street, San Francisco, CA 94109

15. Adjournment

CONTACT EXECUTIVE OFFICE - 939 ELLIS STREET SF, CA 94109

(415) 749-5127
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 2009

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**15**	**9:45 a.m.**	**Board Room**
Board of Directors Legislative Committee *(Meets 2nd Thursday of each Month)*	**Wednesday**	**15**	**Immediately Following Board of Directors Regular Meeting**	**Board Room**
Board of Directors Climate Protection Committee *(Meets 2nd Thursday each Month)*	**Friday**	**17**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Stationary Source Committee *(Meets 3rd Monday Quarterly)*	**Monday**	**20**	**9:30 a.m.**	**Board Room**
Board of Directors Mobile Source Committee *– (Meets 4th Thursday of each Month)*	**Thursday**	**23**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Budget & Finance Committee *(Standing Committee Meeting Date Under Consideration)*	**Wednesday**	**29**	**9:30 a.m.**	**4th Floor Conf. Room**

MAY 2009

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**
Advisory Council Regular Meeting	**Wednesday**	**13**	**9:00 a.m.**	**Board Room**
Board of Directors Legislative Committee *(Meets 2nd Thursday of each Month)*	**Thursday**	**14**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Climate Protection Committee (Meets 2nd Thursday each Month)	**Thursday**	**14**	**Immediately Following Legislative Cme. Meeting**	**4th Floor Conf. Room**

May 2009 Calendar Continued on Next Page

MAY 2009

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Joint Policy Committee	**Friday**	**15**	**10:00 a.m.**	**MTC Auditorium 101 8th Street Oakland, CA 94607**
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 of each Month)*	**Thursday**	**28**	**9:30 a.m.**	**4th Floor Conf. Room**

JUNE 2009

Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**3**	**9:45 a.m.**	**Board Room**
Board of Directors Public Outreach Committee ***(Meets 1st Thursday every other Month)***	**Thursday**	**4**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Legislative Committee *(Meets 2nd Thursday of each Month)*	**Thursday**	**11**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Climate Protection Committee ***(Meets 2nd Thursday each Month)***	**Thursday**	**11**	**Immediately Following Legislative Cme. Meeting**	**4th Floor Conf. Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**17**	**9:45 a.m.**	**Board Room**
Board of Directors Mobile Source Committee – *(Meets 4th Thursday of each Month)*	**Thursday**	**25**	**9:30 a.m.**	**4th Floor Conf. Room**

JL – 4/08/09 (10:09 p.m.)
P/Library/Forms/Calendar/Calendar/Moncal

AGENDA: 1

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Pamela Torliatt and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 7, 2009

Re: Board of Directors' Draft Meeting Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Regular Board of Directors' meeting of April 1, 2009.

DISCUSSION

Attached for your review and approval are the draft minutes of the Regular Board of Directors' meeting of April 1, 2009.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

AGENDA: 1

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

Board of Directors' Regular Meeting
April 1, 2009

DRAFT MINUTES

Call To Order: Chairperson Pamela Torliatt called the meeting to order at 9:58 a.m.

Roll Call: Chairperson Pamela Torliatt, Vice Chairperson Brad Wagenknecht, Susan Garner, John Gioia, Carole Groom, Scott Haggerty, Jennifer Hosterman, Yoriko Kishimoto, Carol Klatt, Liz Kniss, Eric Mar, Mark Ross, Michael Shimansky, James Spering, Gayle Uilkema, Ken Yeager, Shirlee Zane

Absent: Secretary Tom Bates and Directors Harold Brown, Chris Daly, Dan Dunnigan and Nate Miley

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

Public Comment Period:

Kerrie Romanow, City of San Jose, supported Director Yeager's proposal to realign Board seats, spoke of San Jose's demographics, expected population growth, green initiatives, business and economic base.

Consent Calendar Items 1-4:

Director Shimansky requested removal of Item 4 for clarification purposes.

1. Approval of Minutes of March 18, 2009;
2. Communications;
3. District Personnel on Out-of-State Business Travel

Board Action: Director Shimansky moved to approve Consent Calendar Items 1-3; seconded by Director Yeager; carried unanimously without opposition.

Discussion:

4. Consideration of Mediated Grievance Settlement between the Air District and the Employees' Association Regarding Limited Term Employees

Director Shimansky confirmed with staff that the mediated grievance settlement related to the interpretation of terms of the Employees' Association MOU, and that its approval was required by the Board of Directors.

Board Action: Director Shimansky moved to approve Consent Calendar Item 4; seconded by Director Uilkema; carried unanimously without opposition.

Committee Reports:

Report 5. **Legislative Committee Meeting**
March 23, 2009
Report given by Vice Chairperson B. Wagenknecht

March 23, 2009 Committee minutes approved.

Discussion/Actions:

The Committee discussed bills of air quality significance and corresponding agency positions and recommends Board of Directors' approval of eleven (11) positions on bills:

BILL	AUTHOR	DESCRIPTION	POSITION
AB 28	Jeffries	Prohibits air districts from restricting use of public agency natural gas engines to pump water	OPPOSE
AB 118	Logue	Repeals California Global Warming Solutions Act of 2006	OPPOSE
AB 318	Emmerson	Smog check amnesty cleanup (fixing last year's bill)	SUPPORT
AB 859	Jones	Annual smog inspection of older vehicles	SUPPORT
AB 892	Furutani	Allows Prop 1B Goods Movement Emission Reduction Program funds to be reallocated when a project is no longer feasible	SUPPORT
AB 1135	Skinner	VMT data collection at time of registration	SUPPORT
AB 1186	Blumenfield	Requires non-residential building lessors to separately list parking costs in the lease agreement	NEUTRAL UNLESS AMENDED
SB 435	Pavley	Adds post-2000 motorcycles to smog check program	SUPPORT
SB 554	Hollingsworth	Prohibits air districts from restricting the installation or use of wood-burning equipment	OPPOSE

BILL	AUTHOR	DESCRIPTION	POSITION
SB 632	Lowenthal	Requires container ports to assess and report their infrastructure and air quality needs	SUPPORT
SB 728	Lowenthal	Imposes civil penalty for violation of parking cashout law, and allows air districts to impose additional penalties and compliance mechanisms	SUPPORT

The Committee then discussed survey results on Board size and composition, whether to cap the Board at its current size, ramifications of thresholds contained in Option 3, grandfathering in existing City/County representation, and the Committee requested staff to re-poll the Board of Directors. The poll was before the Board who were asked to respond to the survey and leave it at their places.

The Committee then discussed changing the "per day" Board Member compensation language to "per diem" and suggested that legislation be considered and introduced as a two-year bill next year.

Next Legislative Committee Meeting: April 15, 2009 immediately following the Board of Directors meeting, Board Room, 939 Ellis Street, San Francisco, CA 94109.

Board Member Discussion/Comments:

Director Spering voiced non-support of the Committee recommendation, as he did not necessarily agree with all of the bills. Director Shimansky indicated he would support approval, but had voted no on AB 118 and AB 1135, and this was reflected in the Legislative Committee's March 23rd minutes.

Directors discussed final survey options and additional proposals. The consensus was for additional proposals to be discussed at the next Legislative Committee meeting, to add Director Yeager's proposal to the final survey, and that the Memorandum regarding Final Survey on Board Size would thereafter be revised as necessary and provided to the Board of Directors.

Board Action: Director Wagenknecht moved to approve the report and recommendations of the Legislative Committee; Director Uilkema seconded the motion; carried by a roll call vote of 16-1-5 (Spering-no; Bates, Brown, Daly, Dunnigan and Miley-absent).

Report 6. **Climate Protection Committee Meeting**
March 23, 2009
Report given by Chairperson Y. Kishimoto

February 20, 2009 Committee minutes approved, as amended.

Discussion/Actions:

The Committee received an update on the 2009 Climate Action Summit on May 4, 2009 at the Fox Oakland Theater, discussed key logistics and breakout sessions which included:

- Elected Officials Roundtables on Financing Climate Protection, and Technology and the Green Economy;
- Breakout Sessions on SB 375, General Plans and Climate Action Plans, Adaptation Planning, Sustainable Community Financing, Green Building, and Transportation Strategies.

Committee members received a copy of a memorandum from JPC Climate Consultant, Bruce Riordan, regarding Regional Agency Climate Priorities for 2009/2010 which will be agendized and discussed at the next Climate Protection Committee meeting.

Next Climate Protection Committee Meeting: At the Call of the Chair.

Board Action: Director Kishimoto moved to approve the report of the Climate Protection Committee; Vice Chairperson Wagenknecht seconded the motion; carried unanimously without objection.

Report 7. **Mobile Source Committee Meeting**
March 26, 2009
Report given by Chairperson S. Haggerty

February 26, 2009 Committee minutes approved.

Discussion/Actions:

The Committee received an update on the TFCA regional fund program trends which have experienced rapid growth over the past two years and are projected to increase to $148 million in FY 2009/10. This is due mainly to funding for Heavy-Duty Diesel Vehicles (HDV) projects.

The Committee received an update on federal stimulus funding actively being pursued by Air District staff, considered recommendations for the proposed Transportation Fund for Clean Air Regional Fund policies and evaluation criteria for Fiscal Year 2009/2010. The Committee recommends the Board of Directors approve:

1. The proposed Fiscal Year 2009/2010 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A of Agenda Item 5;
2. A shift to an ongoing-call for TFCA Regional Fund applications; and
3. The following TFCA Regional Fund set-asides:
   a. Up to $4 Million for shuttles and rideshare projects;
   b. Up to $2 Million for vehicle-based advanced technology demonstration projects; and
   c. Up to $750,000 for new alternative-fuel/hybrid, heavy-duty trucks in low-mileage, idling service.

The Committee then received an update on the Carl Moyer Voucher Incentive Program and, following extensive discussions regarding its applicability and the matching funds required, the Committee recommended the Board of Directors reserve up to $2 million in Mobile Source Incentive Funds (MSIF) to match $2 million in California Air Resources Board (CARB) funds to establish this program.

Next Mobile Source Committee Meeting: April 23, 2009, 9:30 a.m., 4th Floor Conference Room, 939 Ellis Street, San Francisco, CA 94109.

Board Action: Director Haggerty moved to approve the report and recommendations of the Mobile Source Committee; Vice Chairperson Wagenknecht seconded the motion; carried unanimously without objection.

Report 8. **Budget and Finance Committee Meeting**
March 30, 2009
Report given by Director G. Uilkema

March 30, 2009 Committee minutes approved.

Discussion/Actions:

The Committee received an update on the proposed fee amendments to Regulation 3: Fees and discussed the estimated loss of County property tax, loss of state subvention, impacts to small businesses, additional public comments received to date, trends relating to recovery of costs, ARB's EVR Phase II requirement deadline of April 1st, a modified fee proposal for refinery flares which would increase revenue from $2.5 million to $2.6 million, and the remaining Rule development schedule. The Committee recommended first holding discussion of the proposed Budget for Fiscal Year 2009/2010 prior to making any recommendations on proposed fee increases.

The Committee reviewed the Budget for FY 2009/2010, discussed dollar and percentage changes of the FYE 2009 Amended Program Budget versus the FYE 2010 Proposed Program Budget for Consolidated Revenues, Consolidated Expenditures and General Fund Expenditure.

- Fiscal challenges include declining County revenues, the threat of "take-away's, unfunded medical Liability (OPEB), and deferred maintenance of Air District facilities/equipment;
- Total projected grant funding is expected to be $85 million;
- Air District Initiatives would continue such as the CARE and related Programs; Spare the Air Summer/Winter Program, Woodsmoke Program, and the Climate Protection Program.

The Committee discussed building maintenance versus capital expenditures, possible installation of photovoltaic, building code requirements, future projected receipt and disbursement of California Goods Movement Bond funds, total FTE's, current vacancies, rate of attrition and the suggestion to conduct a management audit of the Human Resources Department.

The Committee recommended that the following revisions be made to the Budget for Fiscal Year 2009/2010, and that further discussion be held during the April 29, 2009 Budget and Finance Committee meeting:

1) Calculate property tax revenue on a county-by-county basis (versus combined) to confirm the estimated 5% in property tax reductions;
2) Provide Line Item details for Travel In-State (Service & Supplies Expenditures).

The Committee unanimously supported the Air District staff's original recommendation of proposed amendments to Regulation 3: Fees, which would increase overall fee revenues by 9%, or result in an additional $2.5 million in revenue.

The Committee then considered and recommended that the Board of Directors:

1) Amend the FY 2008/2009 Operating Budget by increasing the Section 103 Environmental Protection Agency Grant Revenue by $113,908, and correspondingly increase the Capital Equipment Budget for the Laboratory (Program 803); and
2) Authorize the Executive Officer/APCO to issue a purchase order for the instrumentation required by the grant.

The Committee received an update on the Air District's response to recommendations relative to Administrative Policies. The Committee reviewed proposed policies and their expected date for Board consideration and recommended calendaring items accordingly for Board consideration.

Next Budget and Finance Committee Meeting: April 29, 2009, 4th Floor Conference Room, 939 Ellis Street, San Francisco, CA 94109.

Board Action: Director Uilkema moved to approve the report and recommendations of the Budget and Finance Committee; Director Kniss seconded the motion; carried unanimously without objection.

PRESENTATION

Overview of 2008/2009 PM Season – *Staff Presentation by Gary Kendall, Director of Technical Services*

Presentation Highlights:

- Winter 08-09 / 07-08 PM Season Summary showing more drought-like winter conditions and as a result, the number of days the PM 2.5 standard was exceeded increased from last year.
- There were 11 days over the PM 2.5 standard this winter compared to 7 days last winter and correspondingly, Winter Spare the Air Alerts were called on 11 days as compared to 6 days last winter.

- Seasonal rainfall totals were presented from November 1, 2008 through February 28, 2009 as well as the number of days the PM 2.5 was exceeded.
- Winter was unusually warm and dry, with daytime temperatures in the low 70's which is due to high pressure systems over California.
- Transport has been more of a factor than in previous winters.
- Satellite images presented from March 10, 2009 (clear conditions). PM levels in the Central Valley were about twice the PM 2.5 standard while those in the Bay Area were below PM 2.5 standard. During the period, they had northerly winds that kept the valley PM out of the Bay Area. However, on January 17, 2009 winds changed and PM 2.5 standard was exceeded in the Bay Area.
- Bay Area PM 2.5 trends presented and three year averages for each three year period since 2001.
- 2006-EPA reduced National PM 2.5 standard from 65 to 35 ug/m^3
- 2008-EPA made attainment/nonattainment designations-Bay Area designated as nonattainment.
- Plans for attainment due 3 years after effective date (2012)
- Attainment 5 years after effective date (2014)

To reduce PM and precursors, the Board adopted SB 656 Particulate Matter Implementation Schedule in November 2005 and the Wood Burning Rule in July of 2008 (included in SB 656 schedule). Since 2005 Board has adopted 15 rules to reduce ozone & PM precursors and directly emitted PM. Staff are developing 2009 Bay Area Clean Air Plan (CAP) which will be presented to the Board for adoption.

Air District staff are analyzing the effects of the Wood Burning Rule and will present the results of the analyses at the April 20th Stationary Source Committee meeting. Analyses include:

- Field and telephone surveys
- Comparison with previous years
- PM modeling
- PM transport
- PM composition

<u>Board Discussion/Comments:</u>

Director Shimansky questioned and confirmed with Mr. Kendall that EPA regulations allow for exceptions for events such as wild land fires, which can be flagged and would not count toward attainment or non-attainment.

Director Kniss questioned incentive program and follow-up results from District funding and suggested analyses include those cities that may have already banned wood burning. Mr. Broadbent discussed incentives and remaining funding and said that on April 20th staff will conduct an entire review of the program for the Stationary Source Committee.

Director Kishimoto questioned sources of PM in the Central Valley. She confirmed with Mr. Kendall that transport can go in both directions and that weather conditions tend to affect PM more so in the Central Valley.

Update on Port of Oakland Maritime Air Quality Improvement Plan (MAQIP) – *Staff Presentation by Deputy APCO Jean Roggenkamp*

Ms. Roggenkamp provided the following update:

- The Board adopted a Resolution on March 18, 2009 calling for the Port of Oakland to include in its MAQIP some additional near-term actions to improve air quality and public health.
- She presented the Resolution to the Maritime Committee on March 19th.
- Commissioner Margaret Gordon asked that Port staff meet with Air District staff to come to an agreement about what might be included in the MAQIP document.
- Air District and Port staff met on March 31st with Commissioner Gordon. Port staff indicated they would take a recommendation to the Port Commission on April 7th to reinstate $2 million of the original $5 million committed for truck retrofits and to consider how the additional $3 million might also be included.
- Staff is not recommending any changes to the Air District Board's position on the MAQIP document.
- Ports were hurting economically and the southern California ports show the most significant decline but they continue to implement their environmental programs.

Ms. Roggenkamp presented a "Comparison of Short Term Measures to Achieve Public Health Benefits", which demonstrates Southern California Ports as taking significant near-term actions to improve air quality and reduce public health impacts. A chart reflecting changes in container volumes and comparison of current container fees was also presented.

Public Comments:

Richard Sinkoff, Port of Oakland, discussed the continued dialogue regarding the Board's Resolution, believed a significant step was the Port's recommendation to move forward with the $2 million and the potential to add $3 million which would go before their Port Commissioners on April 7th and said additional meetings would cover how funds might be used.

Board Member Comments/Discussion:

Directors discussed and confirmed that Southern California Ports may have templates or programs which could be used by the Port of Oakland to achieve similar levels of progress and benefits.

Directors voiced frustration with inaction by the Port, suggested forced media exposure to bring about public pressure, cited significant health impacts, suggested the Chair draft a letter for the Port to make improvements without the threat of litigation being a driving force. The chart presented contradicted the Port's economy and business levels as diminishing and it was

noted that 80% of the cargo was used for the Bay Area. Directors suggested Port representatives be invited to the next Board meeting to discuss their position and listen to the Board's concerns.

Mr. Broadbent reported that he would be testifying on April 7th at the Port Board of Commissioners regarding the District's position. Chairperson Torliatt noted that she and District staff met with Port staff, Commissioners Uno, Gordon and individually met with Commissioner McClure who was somewhat disappointed that action had not been taken at their prior meeting. She said Commissioner McClure assured her that the Port Commissioners were moving forward on April 7th and she requested that a copy of the presentation on "Comparison of Short Term Measures to Achieve Public Health Benefits" be forwarded to Commissioners.

Directors confirmed with staff that the Resolution suggests prioritizing, setting timelines for the Port of Oakland to address short term measures and are geared to achieve the most public health benefit.

Chairperson Torliatt thanked Mr. Sinkoff for his comments, agreed both parties need to continue to meet, and confirmed that the status of the draft Regulation addressing the Port was forthcoming and would be discussed at the meeting of the Ad Hoc Committee on Port Emissions.

Directors voiced the need to hear from both sides, agreed that a timeline was needed on proposed measures, and suggested a Closed Session be held regarding the legal authority to regulate the Port of Oakland.

Director Gioia suggested a motion to 1) Schedule a Board of Directors Closed Session discussion on the legal issues regarding the Air District's regulatory authority on the Port of Oakland; 2) refer follow-up action to the Port's Ad Hoc Committee on Port Emissions; and 3) continue to provide direction to staff to work toward the Port making improvements on a voluntary basis; Director Kniss seconded the motion.

Discussion:
Directors confirmed that Port representatives would be invited to attend the Ad Hoc Committee on Port Emissions and the next Board of Directors meeting in order to be able to respond to the information presented today.

Board Action: Director Gioia made a motion to 1) Schedule a Board of Directors Closed Session discussion on the legal issues regarding the Air District's regulatory authority on the Port of Oakland; 2) refer follow-up action to the Port's Ad Hoc Committee on Port Emissions; and 3) continue to provide direction to staff to work toward the Port making improvements on a voluntary basis; Director Kniss seconded the motion; Director Kniss seconded the motion; unanimously carried without objection.

CLOSED SESSION
The Board of Directors adjourned to Closed Session at 11:18 a.m.

Public Employee Performance Evaluation (Government Code Section 54957 and 54957.6)

OPEN SESSION

The Board of Directors convened in Open Session at 12:18 p.m. Chair Torliatt gave the following report out from Closed Session:

> "On behalf of the Board of Directors, we would like to take this opportunity to convey our support for the work Jack Broadbent does on behalf of the Bay Area Air Quality Management District. We would also like to convey our confidence in your honesty, integrity, and workplace conduct. The Board unanimously finds this and we find that Jack Broadbent has not violated District policy and has been absolutely truthful."

OTHER BUSINESS:

Report of Executive Officer/APCO:

Update on Air District's Applications for Federal Stimulus Competitive Grant Funding Opportunities

Director of Strategic Incentives Jack Colbourn reported that Air District staff is applying for Diesel Emissions Reduction Act (DERA) funding ($10-$15 million) for replacement, retrofit and repower of diesel heavy-duty trucks, retrofits, locomotive buses and marine vessels. They hope to leverage approximately $2 million in local funding from BAAQMD and approximately $5 million from local transportation companies, and if successful, up to 1500 jobs would be created and/or preserved. The application is due April 28, 2009.

The second program is the Clean Cities Program (Department of Energy). The District is working with all 101 cities in the Bay Area and all 9 counties to create electric vehicle use throughout the Bay Area. The District has been asked by the cities of San Francisco, San Jose, and Oakland to serve as the coordinating agency amongst cities and counties in the Bay Area. Individual jurisdictions will be asked for support of the program and how they can participate. Local funds will be leveraged totaling approximately $7 million, along with $7 million in matching funds from the private sector and local cities and counties and the application due date is May 29, 2009.

Mr. Broadbent noted that the Mobile Source Committee will be kept apprised of all efforts.

Director Haggerty reported that he was one of 75 county officials privy to a meeting with the Vice President who agreed to provide assistance in securing stimulus funding.

Enhanced Vapor Recovery Phase II Deadline for Gas Stations – April 1, 2009:

Mr. Broadbent said many gas station owners have expressed concern regarding regulations implemented by the Air Resources Board for gas stations to install upgrades to equipment. The

compliance date is today and some station owners are having difficulty obtaining credit to finance the purchase of equipment. The Governor's Office instructed the Chair of the ARB to delay implementation and/or provide further instruction.

There are approximately 2,000 stations and 2/3 of those stations are in compliance or close to it, and there are over 300 stations working in good faith with staff to come into compliance. Permits are being expedited, compliance agreements are being negotiated, and accessibility to District staff has been expanded.

Chairperson's Report: Chairperson Torliatt said her Report would be emailed to Directors.

Public Comment – Reopened:

Commissioner Gordon said she is committed to continue to hold discussions regarding resolution to the Port of Oakland's emission reduction issues.

Board Member Comments: None

Time and Place of Next Meeting: 9:45 a.m., Wednesday, April 15, 2009, Board Room, 939 Ellis Street, San Francisco, CA 94109.

Adjournment: Meeting adjourned at 12:28 p.m.

Lisa Harper
Clerk of the Boards

AGENDA: 2

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Pamela Torliatt and
Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 7, 2009

Re: Board Communications Received from April 1, 2009 through April 14, 2009

RECOMMENDED ACTION:

Receive and file.

DISCUSSION

A list of Communications directed to the Board of Directors received by the Air District from April 1, 2009 through April 14, 2009, if any, will be at each Board member's place at the April 15, 2009, Regular Board meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Linda S. Adams
Secretary for Environmental Protection

Air Resources Board

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

Arnold Schwarzenegger
Governor

AGENDA: 3

TO: Members of the Board of Directors

FROM: Honorable Ken Yeager
Board Member

DATE: April 3, 2009

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 6 (date of appointment) through March 31, 2009:

January Activities

13th	Oath Administered
16th	Air Resources Board Staff Briefings
22nd & 23rd	Air Resources Board Meeting, Sacramento

February Activities

2nd	Met with Canadian Consulate re Low Carbon Fuel Standard
2nd	Met with Margo Sidener and Helen Spangler of Breathe California
23rd	Air Resources Board Staff Briefing
25th	Met in Sacramento with members of Environmental Coalition re Agenda Items Coming Before the Board
26th	Air Resources Board Meeting, Sacramento

March Activities

2nd	Breathe California Reception

California Environmental Protection Agency
AIR RESOURCES BOARD

PUBLIC AGENDA

January 22 & 23, 2009

Electronic Board Book

WEBCAST

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

January 22, 2009
9:00 a.m.

DAY-ONE

Agenda Item #	Agenda Topic
09-1-7:	**Report to the Board on the Air Resources Board's Program Priorities for 2009** *ARB Executive Officer James Goldstene will brief the Board on major program priorities for 2009.* Staff Presentation
09-1-1:	**Health Update: Potential Health Impacts of Residential Wood Burning** *The health impacts of exposure to fine particulate matter, such as increased risk for mortality and asthma exacerbations, are well established. Yet, the components of particulate matter that may be most responsible for these health effects are not known. This month's health update highlights a study of the potential health impacts of exposure to wood smoke in asthmatic children. The study found lung function changes in the exposed children, which may be related to combustion-generated components of ambient particulate matter, including wood burning sources.* More Information Staff Presentation
09-1-2:	**Public Hearing to Consider the Adoption of a Proposed Regulation for Small Containers of Automotive Refrigerant** *Air Resources Board (ARB or Board) staff is proposing a Discrete Early Action regulation that would reduce greenhouse gas emissions associated with do-it-yourself recharging of motor vehicle air conditioning systems. This regulation would achieve greenhouse gas emission reductions through*

control strategies.

More Information Staff Presentation

09-1-5: **Public Meeting to Consider Approval of California's Regional Haze Plan**

The Regional Haze Plan charts a path towards visibility improvement through 2018 at 29 of California's national parks and wilderness areas.

Staff Presentation

January 23, 2009
8:30 a.m.

DAY-TWO

Agenda Item #	Agenda Topic
09-1-8:	**Public Hearing to Consider Adoption of Plug-In Hybrid Electric Vehicles Test Procedure Amendments and Aftermarket Parts Certification Requirements**

ARB staff has developed modifications to existing exhaust and evaporative test procedures in the passenger car, light-duty truck, and medium-duty classes to address operating characteristics of plug-in hybrid electric vehicles. New certification and installation requirements for aftermarket kits converting hybrid electric vehicles to plug-in hybrid electric vehicles will also be presented for adoption.

More Information Staff Presentation

09-1-9: **Public Hearing to Consider Appointment of Members to the Regional Targets Advisory Committee under Senate Bill 375**

Senate Bill 375 (Steinberg, chapter 728, statutes of 2008) requires ARB to provide metropolitan planning organizations with passenger vehicle greenhouse gas reduction targets by September 30, 2010. The bill requires ARB, no later than January 31, 2009, to appoint a Regional Targets Advisory Committee to recommend factors to be considered and methodologies to be used for setting regional greenhouse gas reduction targets. Staff will describe the scope of the committee's work and the Board will appoint committee members.

More Information More Information II 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 litigation:

Central Valley Chrysler-Jeep, Inc. et al. v. Goldstene, U.S. Court of Appeals, Ninth Circuit, No. 08-17378 on appeal from U.S. District Court (E.D. Cal. - Fresno).

Fresno Dodge, Inc. et al. v. California Air Resources Board et al., Superior Court of California (Fresno County), Case No. 04CE CG03498.

General Motors Corp. et al. v. California Air Resources Board et al.,

LOCATION:

California Environmental Protection Agency
AIR RESOURCES BOARD

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

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PUBLIC MEETING AGENDA

WEBCAST

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

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

February 26, 2009
9:00 a.m.

Agenda Item #	Agenda Topic
09-2-1:	**Health Update: Exposure to Traffic-Related Air Pollution and Indicators of Adverse Health Effects in Adults with Heart Disease** *It is well recognized that exposure to particulate matter (PM) is associated with heart disease and premature death. However, little is known regarding which components of PM are most responsible for harmful effects. This study showed that increased levels of heart disease indicators were most associated with smaller particles and the directly emitted organic carbon component of traffic-related PM.* More Information Staff Presentation
09-2-2:	**Public Hearing to Consider 11 Research Proposals** *1. "Environmental Exposures in Early Childhood Education Environments," University of California, Berkeley, $417,496, Proposal No. 2665-263.* *2 "Measurement of Diesel Solid Nanoparticle Emissions Using a Catalytic Stripper for Comparison to Europe's PMP Protocol," University of California, Riverside, $170,000, Proposal No. 2664-263.* *3. "Integrated Physical, Chemical and Optical Measurements of Heavy-Duty Diesel Emissions at NASA AMES Full Scale Wind Tunnel," University of California, Davis, $419,917, Proposal No. 2673-263.* *4. "Advanced Understanding of Particle Radiative Forcing Emitted from Combustion Sources in California," University of California, San*

Replacement Members to the Economic and Technology Advancement Advisory

Staff will update the Board on the status of implementing the Climate Change Scoping Plan and propose appointment of replacement members to ETAAC.

More Information Staff Presentation

09-2-6: **Public Meeting to Report to the Board on Staff's Nonattainment Area Recommendations for the Revised Federal 8-Hour Ozone Standard**

Staff will present nonattainment area recommendations for the new federal 0.075 ppm 8 hour ozone standard. ARB will submit these recommendations to the United States Environmental Protection Agency by March 12, 2009.

More Information Staff Presentation

09-2-7: **Public Meeting to Consider the Approval of New Grants under the Innovative Clean Air Technologies (ICAT) Program**

In response to a public solicitation for applications to the ICAT program, staff has received and reviewed proposals for the quality of their innovative technologies, their potentials for reducing air pollution and for commercial application in California, their potential economic benefits for California, the quality of the proposed demonstration projects, and their values to ARB programs. Staff is recommending grants for four of the proposed projects.

More Information Staff Presentation

09-2-8: **Public Meeting to Present "Beyond the Press Release: How a Comprehensive Outreach Campaign Can Help Drive Policy"**

The Director of Communications will provide an overview of how comprehensive, strategic communications programs can compliment the Board's regulatory programs.

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 litigation:

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Fresno Dodge, Inc. et al. v. California Air Resources Board et al., Superior Court of California (Fresno County), Case No. 04CE CG03498.

General Motors Corp. et al. v. California Air Resources Board et al., Superior Court of California (Fresno County), Case No. 05CE CG02787.

State of California by and through Arnold Schwarzenegger, the California Air Resources Board, and the Attorney General v. U.S. Environmental Protection Agency, and Stephen L. Johnson, Administrator, U.S. Court of Appeals, District of Columbia Circuit, Case No. 08-1178.

California Environmental Protection Agency
AIR RESOURCES BOARD

LOCATION:

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PUBLIC MEETING AGENDA

WEBCAST

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

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

March 26, 2009
9:00 a.m.

Agenda Item #	Agenda Topic
09-3-1:	**Health Update: Air Pollution and Childhood Respiratory Allergies** *Staff will present the results from a recent study that investigated the association between air pollution exposure and childhood respiratory allergies in the United States. The study found associations between particulate matter and ozone exposures and parental reports of hay fever and/or respiratory allergies. These results, which are from a large national study, emphasize the importance of reducing ambient pollutant exposures in protecting children's health. Additional information regarding the impact of airborne allergens on health will also be discussed.* More Information Staff Presentation
09-3-2:	**Public Hearing to Consider the Adoption of the Proposed Regulation to Reduce Greenhouse Gas Emissions from Vehicles Operating with Under-Inflated Tires** *The proposed regulation would reduce greenhouse gas emissions from vehicles operating with under-inflated tires. It would accomplish this goal by requiring all automotive service providers in California to perform a tire pressure service (check and inflate) when automotive maintenance or repair services are performed.* More Information Staff Presentation
09-3-3:	**Public Meeting to Report to the Board on the Development Process for State Implementation Plans and the Schedule of Upcoming Plans** *Staff will present the Air Resources Board (ARB or Board) with an overview of the Clean Air Act planning requirements for nonattainment areas. Staff will describe the State Implementation Plan process, its key elements, and the*

the LCFS regulation. The purpose of the overview is to provide the Board with general information on the LCSF prior to the April 23, 2009 hearing. This is an informational hearing only; no action will be taken by the Board.

More Information Staff Presentation Michael O'Hare UC Berkeley Stephen Kaffka UC Davis

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 litigation:

Central Valley Chrysler-Jeep, Inc. et al. v. Goldstene, U.S. Court of Appeals, Ninth Circuit, No. 08-17378 on appeal from U.S. District Court (E.D. Cal. - Fresno).

Fresno Dodge, Inc. et al. v. California Air Resources Board et al., Superior Court of California (Fresno County), Case No. 04CE CG03498.

General Motors Corp. et al. v. California Air Resources Board et al., Superior Court of California (Fresno County), Case No. 05CE CG02787.

State of California by and through Arnold Schwarzenegger, the California Air Resources Board, and the Attorney General v. U.S. Environmental Protection Agency and Stephen L. Johnson, Administrator, U.S. Court of Appeals, District of Columbia Circuit, Case No. 08-1178.

Green Mountain Chrysler-Plymouth-Dodge-Jeep, et al. v. Crombie, 508 F.Supp.2d 295, U.S. District Court Vermont (2007), appeal to U.S. Court of Appeals, Second Circuit,
Nos. 07-4342-cv(L) and 07-4360-cv(CON).

Tesoro Refining and Marketing Company v. California Air Resources Board, Superior Court of California (Sacramento County), Case No. 34-2008-80000064.

National Paint and Coatings Association, Inc. et al. v. California Air Resources Board et al., Superior Court of California (Sacramento County), Case No. 04CS01707.

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 meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

TO: Chairperson Pamela Torliatt and
Members of the Board of Directors

FROM: Jack P. Broadbent
Executive Officer/APCO

DATE: April 7, 2009

RE: Quarterly Report of the Executive Office: January 1, 2009 – March 31, 2009

RECOMMENDED ACTION

This report is provided for information only.

DISCUSSION

Listed below is the status of minutes for the Board of Directors and Advisory Council and activities of the Hearing Board for the first quarter of 2009**:**

Board of Directors

Meeting Type	**Meeting Date**	**Status of Minutes**
Regular Meeting	January 7	Minutes Approved
Regular Meeting / Retreat	January 21	Minutes Approved
Regular Meeting	February 4	Minutes Approved
Regular Meeting	March 4	Minutes Approved
Regular Meeting	March 18	Minutes Approved
Climate Protection Committee	January 8	Minutes Approved
Climate Protection Committee	February 20	Minutes Approved
Climate Protection Committee	March 23	Minutes Completed/Pending Approval
Stationary Source Committee	January 12	Minutes Completed/Pending Approval
Legislative Committee	January 8	Minutes Approved
Legislative Committee	January 26	Minutes Approved
Legislative Committee	February 23	Minutes Approved
Legislative Committee	March 23	Minutes Completed/Pending Approval
Budget & Finance Committee	January 28	Minutes Approved
Budget & Finance Committee	February 25	Minutes Approved
Budget & Finance Committee	March 30	Minutes Completed/Pending Approval
Mobile Source Committee	January 23	Minutes Approved
Mobile Source Committee	February 26	Minutes Approved
Mobile Source Committee	March 26	Minutes Completed/Pending Approval
Executive Committee	March 16	Minutes Completed/Pending Approval
Personnel Committee	February 18	Minutes Approved
Personnel Committee	March 6	Minutes Completed/Pending Approval
Ad Hoc Cme. on Port Emissions	January 22	Minutes Approved
Ad Hoc Cme. on Port Emissions	March 12	Minutes Completed/Pending Approval

Advisory Council

Meeting Type	Meeting Date	Status of Minutes
Regular Meeting / Retreat	January 14	Minutes Approved
Regular Meeting	February 11	Minutes Completed/Pending Approval
Regular Meeting	March 11	Minutes Completed/Pending Approval

Hearing Board

1. During the Period January-March 2009, the Hearing Board processed and filed a total of five (5) Applications: Two (2) Emergency Variances and three (3) Regular Variances. Two (2) Status Reports were received and filed for one Appeal and one Accusation.

   One (1) Appeal scheduled to be heard in the first quarter was requested to be continued by the Appellant, which was approved by the Hearing Board.

   Also processed were hearing notices and filings for those applications. The Hearing Board also prepared a formal response letter to the Air Resources Board Enforcement Division regarding its approval of a Variance application.

2. A total of one (1) hearing was held.

3. A total of $6,140.49 was collected as Hearing Board fees (applications and noticing) during the first quarter of 2009.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and
Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 7, 2009

Re: Set Final Public Hearing for May 20, 2009 to Consider Adoption of Proposed Amendments to District Regulation 3: Fees, and Approval of a Notice of Exemption from CEQA

RECOMMENDED ACTION:

Set a Final Public Hearing for May 20, 2009 to consider adoption of proposed amendments to District Regulation 3: Fees, and approval of filing of a Notice of Exemption from the California Environmental Quality Act.

DISCUSSION

A public hearing notice, and the proposed amendments to Regulation 3 are available for review by request and have been posted on the Air District's website at http://www.baaqmd.gov/pln/ruledev/regulatory_public_hearings.htm.

BUDGET CONSIDERATION/FINANCIAL IMPACTS

The proposed amendments to the District's fee regulation would not impact the current fiscal year's budget but, if adopted, would increase fee revenue in the upcoming FYE 2010 by approximately $2.6 million.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian Bateman
Reviewed by: Jeffrey Mckay

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and
Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 7, 2009

Re: Set Public Hearing for May 20, 2009 to for the Exclusive Purpose of Considering Testimony on the Air District's Proposed Budget for FYE 2010 and a Final Public Hearing Set for June 3, 2009 to Consider Adoption of Proposed Budget for FYE 2010

RECOMMENDED ACTION:

Set a Public Hearing for May 20, 2009 for the exclusive purpose of considering testimony on the Air District's Proposed Budget for FYE 2010 and a Final Public Hearing set for June 3, 2009 to consider adoption of the Proposed Budget for FYE 2010.

DISCUSSION

Pursuant to Health and Safety Code Section 40131 two public hearings are needed for the adoption of the Proposed Budget for FYE 2010. The first public hearing to consider testimony from the public on this matter has been set for May 20, 2009. Final public hearing has been set for June 3, 2009.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mary Ann Goodley
Reviewed by: Jeffrey Mckay

AGENDA: 7

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson, Pamela Torliatt and
Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 3, 2009

Re: Report of the Public Outreach Committee Meeting of April 2, 2009

RECOMMENDED ACTIONS

The Public Outreach Committee recommended Board of Directors' approval of contracts to assist with public outreach and approval for the Executive Officer/APCO to execute contracts to include the following

- Advertising Services – O'Rorke Inc.

Summer Spare the Air	$600,000
Winter Spare the Air	$600,000
Not to exceed	$1,200,000

- Advertising Services – RHDG

Smoking Vehicles	$275,000
Grants & Incentives	$200,000
Not to exceed	$475,000

- Media/Public Relations Services – MS&L Public Relations

Summer Spare the Air	$250,000
Winter Spare the Air	$250,000
Not to exceed	$500,000

- Media/Public Relations Services – Allison & Partners[1]

Employer Program	$150,000
Not to exceed	$150,000

BACKGROUND

The Public Outreach Committee met on Thursday, April 2, 2009. The Committee received the following report and recommendations:

A) Update on the Wintertime Spare the Air Alert Campaign for the 2008/2009 season

B) Consideration of Approval of Contractors for Public Outreach Programs

[1] Please note that the original staff report in the Committee packet differs from the Recommended Actions of this report. Staff presented a revised recommendation at the Committee meeting to request that Allison & Partners be awarded the contract for the Employer Program as part of media/public relations services.

Attached are the staff reports presented in the Public Outreach Committee packet.

Chairperson Ross will give an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT CONTINUED

A) Funding for the outreach program is included in the FY 2008/09 Budget

B) Funding for activities conducted from April 2009 through June 30, 2009 is included in the current budget. Activities after July 1, 2009 will be included in the FY 2009/10 budget. Funding for these contracts comes from three sources: a Congestion Mitigation Air Quality (CMAQ) grant, the Transportation Fund for Clean Air (TFCA) program, and General Revenues.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Lisa Harper
Approved by: Mary Ann Goodley

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Ross and Members of the Public Outreach Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 24, 2009

Re: Update on Wintertime Spare the Air Alert Campaign

RECOMMENDED ACTION:

For information only.

BACKGROUND

Staff will present an update of the overall Wintertime *Spare the Air Alert* campaign for the 2008/2009 season.

DISCUSSION

The Wintertime *Spare the Air Alert* advertising and outreach campaign was implemented during the 2008/2009 winter season. A major component was the new Wood Smoke Rule.

The Wintertime *Spare the Air Alert* campaign informed residents about the new Wood Smoke Rule, how they could comply with the rule, and why its important to their health and the health of their families.

Campaign messages were delivered to the public through TV, print, billboard, radio, Internet, grassroots and in-theater advertising. Educational materials were developed and distributed to the public via mail, at public events, through door-to-door canvassing and through the Air District's websites.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

Funding for the outreach program is included in the FY 2008-09 Budget.

Respectfully submitted,

Jack P. Broadbent For
Executive Officer/APCO

AGENDA: 5

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Ross and Members
of the Public Outreach Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 24, 2009

Re: Consideration of Recommending Board of Directors' Approval for Public Outreach Contractors

RECOMMENDED ACTION

Consider recommending Board of Directors' approval for the contracts that assist with public outreach including the following:

- Advertising Services – O'Rorke Inc.
  Summer Spare the Air -- $600,000
  Winter Spare the Air -- $600,000
  Employer Program -- $150,000
  Not to exceed $1,350,000

- Advertising Services – RHDG
  Smoking Vehicles -- $275,000
  Grants & Incentives -- $200,000
  Not to exceed $475,000

- Media/Public Relations Services – MS&L Public Relations
  Summer Spare the Air -- $250,000
  Winter Spare the Air -- $250,000
  Not to exceed $500,000

BACKGROUND

The Air District's Communications and Outreach Office relies on contractors to assist with various aspects of its advertising and outreach programs. The Communications and Outreach Office recently completed a Request for Proposal (RFP) process to solicit responses for the following services: Advertising Services and Media/Public Relations Services.

- **Advertising Services:** To develop professional quality broadcast, print and digital advertising/educational materials for a variety of District programs.
- **Media/Public Relations Services:** To provide media relations services to promote agency activities.

DISCUSSION

RFPs were released on February 18, 2009, and responses were due on March 4, 2009. On that date, 12 responses were received for both the Advertising Services and the Media/Public Relations RFPs. Six proposals were received for the Advertising Services RFP and six proposals were received for the Media/Public Relations Services RFP.

The contracts will have a term of twelve months, which may be extended for two additional years at the District's sole discretion. After evaluating proposals, conducting interviews and checking references, staff recommends the Board approve the following contracts:

Advertising Services – O'Rorke Inc. has a solid background in social marketing and advertising. They have experience working with local government agencies to produce television, radio and print advertisements. Staff recommends that O'Rorke be awarded the Advertising Services contract for summer and winter Spare the Air, and the Employer Program (see Table 1).

Advertising Services – RHDG has extensive experience in social marketing and advertising. They have experience working with local government agencies to produce television, radio, digital and print advertisements. RHDG has extensive social and digital marketing experience that will help the Air District reach new audiences in a cost-effective manner. Staff recommends that RHDG be awarded the Advertising Services contract for the Smoking Vehicles and the Grants and Incentives Program (see Table 1).

Media/Public Relations Services – MS&L Public Relations has strong expertise in media relations – including ethnic media, an extensive network of media contacts, and direct experience handling environmental issues for government clients. Staff recommends that MS&L be awarded the Media/Public Relations Services contract (see Table 2).

EVALUATION

Responsiveness of Proposal. This category evaluated the responsiveness of the proposal clearly stating an understanding of the work to be performed and comprehensiveness of the proposal to address the objective. This category also evaluated the overall experience and accomplishments of the consulting team and project management staffing.

Cost Proposal. Costs were evaluated for adequacy in relation to the outlined scope of the project.

References, Green Operating Practices and Local Businesses. The District supports green operating practices and local businesses and gives a preference to local businesses engaged in green business practices. Proposals were evaluated to determine the extent of bidder's commitment to environmentally sound operational practices.

Expertise and Experience of Team. This category evaluated the overall experience and accomplishments of the team and specifically, environmental and governmental experience.

Project Management Experience. This category evaluated the team's experience developing environmental guidelines and protocols for government agencies within the project management framework.

The scoring and total points for each of the RFPs are contained in the following tables.

Table 1
Advertising Services

Evaluative Criteria	O'Rorke Inc.	Swirl	RHDG
Proposal (25 points)	24.5	18	21.8
Expertise & Experience (30 points)	27	28	27
Project Management (15 points)	14.2	7	13.5
Cost (20 points)	17.8	8	19.5
References/Local/Green Business (10 points)	8.3	16	8.16
Total Points	**91.8**	**77**	**89.96**
Evaluative Criteria	**Hatch**	**Duncan/ Channon**	**Enhanced Visual Images**
Proposal (25 points)	11.2	10.3	12.8
Expertise & Experience (30 points)	17	20.2	19.2
Project Management (15 points)	5.3	7.6	7.8
Cost (20 points)	7.5	6.1	13.1
References/Local/Green Business (10 points)	9.8	5	2
Total Points	**50.8**	**49.2**	**54.9**

Table 2
Media/Public Relations Services

Evaluative Criteria	MS&L	Allison & Partners	Southard
Proposal (25 points)	19.8	19.8	19.8
Expertise & Experience (30 points)	21.4	21	20
Project Management (15 points)	11.6	11.4	10
Cost (20 points)	11.4	11.6	11.4
References/Local/Green Business (10 points)	7.4	6	2.8
Total Points	**71.6**	**69.8**	**64**
Evaluative Criter13ia	**Katz & Assoc.**	***Community Focus**	***Environmental Compliance**
Proposal (25 points)	15	20.4	14.3
Expertise & Experience (30 points)	19	24	21.5
Project Management (15 points)	11.8	12.2	9.8
Cost (20 points)	13.4	10.8	14.8
References/Local/Green Business (10 points)	6.2	8.4	5
Total Points	**65.4**	**75.8**	**65.4**

* Proposal submitted for Employer Program only.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding for activities conducted from April 2009 through June 30, 2009 is included in the current budget. Activities after July 1, 2009 will be included in the FY 2009/10 budget. Funding for these contracts comes from three sources: a Congestion Mitigation Air Quality (CMAQ) grant, the Transportation Fund for Clean Air (TFCA) program, and General Revenues.

Respectfully submitted,

Jack P. Broadbent FOR
Executive Officer/APCO

Prepared by: Lisa Fasano
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt
and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 6, 2009

Re: Public Hearing to Consider Proposed Amendments to Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles; and Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles; and Adoption of a Negative Declaration pursuant to the California Environmental Quality Act

RECOMMENDED ACTION

Staff recommends that the Board of Directors take the following actions:

- Adopt proposed amendments to Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles;
- Adopt proposed amendments to Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles; and
- Adopt a Negative Declaration pursuant to the California Environmental Quality Act (CEQA) for this rule-making activity.

BACKGROUND

Regulation 8, Rule 33 sets emission limits for volatile organic compounds (VOCs) from gasoline bulk terminals. Regulation 8, Rule 39 sets similar limits for gasoline bulk plants. These rules complement the California Air Resources Board's (CARB) regulation of gasoline cargo tank delivery vehicles and incorporate CARB's requirements for gasoline cargo tank delivery vehicles. Proposed amendments to Regulation 8, Rule 33 and Rule 39 would reduce VOC emissions and reduce the frequency of events that cause episodic VOC emissions. The proposed amendments would fulfill the District's commitment to examine amendments to Regulation 8, Rule 33 and Rule 39 as stated in control measure SS-7: "Gasoline Bulk Terminals and Plants" of the Bay Area 2005 Ozone Strategy.

Amendments to Regulation 8, Rules 33 and 39 were presented, but not adopted, during a February 4, 2009 public hearing held by the Board of Directors. The proposed amendments were revised during the February 4, 2009 public hearing and have been further revised based on public comments received subsequent to the February hearing. The current proposal replaces the proposal previously noticed and presented at the February 4, 2009 public hearing. The most significant change from the February 4 draft is to propose a lower vapor leak limit of 3,000 ppm or 6% of the Lower Explosive Limit (LEL).

DISCUSSION

Just prior to the public hearing on February 4, 2009, California Air Resources Board legal staff clarified District authority to establish more restrictive vapor leak limits on gasoline terminal and bulk plant facilities pursuant to Article 5 §39659 and 41954 of the California Health and Safety Code. The Board continued the public hearing in order to provide notice to interested parties and to solicit comments on a new, lower vapor leak standard. Staff proposes a vapor leak limit of 3,000 ppm (as methane) or 6% of the Lower Explosive Limit (LEL). The current standard in Regulation 8, Rules 33 and 39 is 100% of LEL. The new proposed standard would affect loading arm and vapor recovery hose connectors, and pressure/vacuum valves in gasoline bulk terminals and bulk plants. Repair periods are proposed for facilities where self inspection identifies a vapor or liquid leak.

Overall, proposed amendments to Regulation 8, Rule 33 and Rule 39 would reduce VOC emissions and reduce the frequency of events that cause episodic VOC emissions. The proposed amendments include:

1. A reduction in the allowable emission limit, and a requirement to monitor vapor recovery system performance to ensure the vapor recovery system operates properly;
2. A reduction of vapor leak and liquid leak standards in the rules, and a repair period to address leaks found by self inspection;
3. A requirement that loading arm connectors and cargo tank vapor recovery connectors are compatible prior to gasoline loading, and meet the vapor and liquid leak standards;
4. A requirement to install pressure sensors to monitor vapor collection piping backpressure, and an alarm or automatic shutdown if backpressure exceeds 18 inches water column;
5. A requirement to install block or vapor check valves in each loading rack vapor collection header to minimize emissions when maintenance is required;
6. A requirement that vapor hose connectors are stored out of the way of the truck driveway to prevent damage to the connectors, which can be a significant source of VOC leakage;
7. A requirement to monitor vapor storage tank airspace emissions to ensure all leaks are discovered and repaired quickly;
8. A requirement to install sample lines on the pressure and vacuum sides of inaccessible pressure/vacuum valves to provide ready access to check for leaks;
9. A requirement to further control the release of organic compounds during operational, maintenance and repair operations.
10. A requirement for an APCO-approved vapor recovery system monitoring, inspection, notification and reporting protocol.
11. A requirement that plants and terminals apply for new or revised certifications of their equipment with the California Air Resources Board (CARB) if substantive changes are made to their existing equipment.
12. Revision to definitions and updates to source test requirements to be consistent with federal and state requirements.

As specified in the proposed rule language, various elements of the amendments are effective upon adoption, July 1, 2009 or January 10, 2011.

The proposed amendments will reduce VOC emissions by at least 0.07 tons per day, and will reduce the frequency and magnitude of episodic VOC emissions from terminals and bulk plants, resulting in additional emission reductions.

A socioeconomic analysis has found that the costs of the rule would not create significant economic dislocation, loss of jobs, or impact small business.

Pursuant to the California Environmental Quality Act (Public Resources Code § 21080(c) and CEQA Guidelines 15070 et seq.), a CEQA analysis has been prepared by Environmental Audit, Inc., of Placentia, California. This analysis concludes that the proposed amendments would not have any significant adverse environmental impacts. A negative declaration pursuant to CEQA is proposed for adoption.

RULE DEVELOPMENT PROCESS

The proposed rule amendments are the result of an extensive public process. The District developed proposed amendments based on existing regulations in the South Coast air district, visits to gasoline bulk terminals and one bulk plant, a visit to a cargo tank operations and maintenance facility, discussions with bulk terminal and bulk plant operators, Western States Petroleum Association and other affected stakeholders, and e-mail information exchange and discussions with California Air Resources Board and South Coast air district staff. Public workshops for both rules were held on October 6, 2008. Twelve people representing gasoline bulk terminals and two people representing bulk plants participated in the workshops, providing oral and written comments. Staff incorporated these comments into the current proposed amendments, as appropriate.

Initial proposed amendments, staff report, socio-economic report, CEQA initial study and proposed negative declaration, and public hearing notice were first posted for public review on December 29, 2008. Seven written comments were received. After the February 4, 2009 initial public hearing, a notice advising the public of the continuation of the hearing and revised proposal were posted for public review. Several oral comments and one written comment were received. Staff incorporated appropriate comments and re-posted the final proposed amendments, staff report, socio-economic report, CEQA study and proposed negative declaration on March 11, 2009, re-noticing the final proposed amendments for an April 15, 2009 public hearing. No additional comments have been received. A summary of the comments to each posting and staff's responses is attached as Appendix A of the staff report.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS

None. The District already inspects and conducts source tests on gasoline bulk terminals and gasoline bulk plants. These amendments will not require additional District resources.

Respectfully submitted,

Jack P. Broadbent
Executive Officer / Air Pollution Control Officer

Prepared by: Guy Gimlen
Reviewed by: Henry Hilken

Attachments:

Proposed amendments to Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles; and proposed amendments to Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles

Staff Report, including Appendices:

A. Comments and Responses
B. Socioeconomic Analysis
C. CEQA Initial Study and Negative Declaration

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ORGANIC COMPOUNDS
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GASOLINE BULK TERMINALS AND GASOLINE CARGO TANKS ~~DELIVERY VEHICLES~~

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REGULATION 8
ORGANIC COMPOUNDS
RULE 33
GASOLINE BULK TERMINALS AND GASOLINE CARGO TANKS ~~DELIVERY VEHICLES~~

(Adopted November 30, 1983)

8-33-100 GENERAL

8-33-101 Description: The purpose of this Rule is to limit emissions of organic compounds associated with ~~from~~ gasoline transfer operations at gasoline bulk terminals and organic compounds from gasoline cargo tanks ~~delivery vehicles~~.

(Amended October 7, 1987; June 1, 1994)

~~**8-33-110 Exemptions**~~

8-33-111 Exemption, Cargo Tanks~~Delivery Vehicle Exemptions~~: The requirements of ~~subs~~Sections 8-33-304.1, ~~and~~ 304.2 and 304.6 do not apply to cargo tanks ~~gasoline delivery vehicles which~~ that deliver exclusively to:

111.1 Storage tanks with an actual capacity of less than ~~1.0 cubic meter (~~2~~6~~50 gallons~~)~~.

111.2 Storage tanks installed prior to February 18, 1987, with an annual throughput of less than ~~227 cubic meters (~~60,000 gallons~~).~~, provided the storage tanks are exempt from Phase I requirements pursuant to Regulation 8, Rule 7.

111.3 Storage tanks with a capacity of less than ~~2.2 cubic meters (~~550 gallons~~),~~ used primarily for the refueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code, provided such tanks are equipped with a submerged fill pipe.

111.4 Storage tanks, where the APCO determines that the Phase I gasoline vapor recovery requirements identified in Regulation 8, Rule 7 are ~~is~~ not feasible.

(Amended January 9, 1985; October 7, 1987; June 1, 1994)

8-33-112 Exemption, Tank Gauging and Inspection ~~Exemption~~: Any gasoline cargo tank may be opened for gauging or inspection ~~when loading operations are not in progress~~, provided that ~~such~~ the tank is not pressurized or being loaded.

(Amended and Renumbered October 7, 1987)

8-33-113 Exemption, Maintenance and Repair ~~Exemption~~: The requirements of Section 8-33-304.4, 304.5, and 306 shall not apply to liquid gasoline spills and vapor leaks resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of gasoline into the atmosphere to the greatest extent practicable.

(Renumbered October 7, 1987)

8-33-114 Exemption, CARB Certification: CARB certification requirements in this Rule do not apply to vapor recovery equipment or systems where the gasoline bulk terminal owner or operator demonstrates that CARB has determined that such equipment or systems are not required to be CARB certified.

8-33-115 Limited Exemption, Aviation Gasoline: The distribution of aviation gasoline to and from bulk terminals:

115.1 is exempt from this Rule's CARB certification requirements of the vapor recovery system.

115.2 is exempt from the requirements of Sections 8-33-304.5 and 306 when sampling is required for quality assurance.

8-33-116 Limited Exemption, Source Test Requirements: Any gasoline bulk terminal vapor processing unit that collects organic vapors and routes them to a fuel gas system for combustion shall be exempt from the emission factor source test requirement in 8-33-309.4, provided the gasoline bulk terminal control device has a source test requirement in an EPA approved Title V permit and provided that the terminal conducts an annual source test on its vapor recovery system which demonstrates that the system complies with the leakage requirements outlined in Sections 8-33-

309.5 and 8-33-309.6, pursuant to the procedures set forth in CARB Test Procedures TP-203.1 and TP-204.3.

8-33-200 DEFINITIONS

8-33-201 CARB Certified Vapor Recovery System: A gasoline bulk terminal vapor recovery system that ~~which~~ has a valid ~~been~~ certification~~ed~~ issued by the California Air Resources Board (CARB), pursuant to Section 41954 of the California Health and Safety Code. (Amended October 7, 1987)

8-33-20~~3~~2 Gasoline: Any p~~P~~etroleum distillate~~s~~, including aviation gasoline and additives, that has ~~used as motor fuel with~~ a Reid vapor pressure of ~~greater than~~ four (4.0) pounds or greater.

8-33-20~~2~~3 Gasoline Bulk Terminal: A gasoline storage and distribution~~ing~~ facility that ~~which~~ receives gasoline by ~~other than~~ marine tanker ~~truck~~, barge, pipeline, or rail car, ~~stores it in stationary tanks,~~ and loads it into gasoline cargo tanks ~~trucks~~ for delivery to gasoline bulk plants, service stations, and ~~or~~ other distribution points.

(Amended October 7, 1987; June 1, 1994)

8-33-204 Gasoline Cargo Tank: Any container, including its associated pipes and fittings, that is attached to a vehicle used to transport gasoline and is required to be certified in accordance with Section 41962 of the California Health and Safety Code.

8-33-20~~4~~5 Liquid Leak Free: A liquid fill connector or vapor hose connector that does not leak liquid ~~leak~~ in excess of three drops per minute, or 10 mililiters per disconnect averaged over three consecutive disconnects, as set forth in CARB CP-203, *Certification Procedure for Vapor Recovery Systems of Terminals* for gasoline bulk terminal connectors, or CARB CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks* for gasoline cargo tank connectors.~~of less than four drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect., averaged over three disconnects.~~

8-33-206 Loading Event: Transferring liquid gasoline into and receiving vapors from a gasoline delivery vehicle, including all individual cargo tanks and compartments.

8-33-2~~1~~07 Non-Methane Organic Compound (NMOC): Any compound of carbon, excluding methane, carbon monoxide, carbonic acid, metallic carbides, ~~or~~ metallic carbonates and ammonium carbonate.

8-33-208 Portable Maintenance Container: A portable vessel or tank with a capacity of less than 250 gallons, equipped with liquid and vapor hose connectors that temporarily stores gasoline.

8-33-209 Reid Vapor Pressure: The vapor pressure of an organic liquid at 100 degrees Fahrenheit, except liquefied petroleum gases, as determined in accordance with the Manual of Procedures, Volume III, Method 13, the most current version of ASTM D323, or the equivalent method described in California Code of Regulations Title 13, Section 2297.

8-33-210 Slop Tank: Any permanent or fixed container that has the primary function of temporarily storing petroleum product and other liquids that have been collected during maintenance or loading operations and are not loaded into a gasoline cargo tank.

8-33-2~~05~~11 Submerged Fill Pipe: Any storage tank fill ~~discharge~~ pipe ~~or nozzle~~ which meets ~~either~~ one of the following conditions:

2~~05~~10.1 If ~~Where~~ the tank is filled from the top, the end of the discharge pipe is ~~or nozzle must be~~ totally submerged when the liquid level is six ~~15 cm~~ (6) inches~~.)~~ above ~~from~~ the bottom of the tank.

2~~05~~10.2 If ~~Where~~ the tank is filled from the side, the discharge pipe is ~~or nozzle must be~~ totally submerged when the liquid level is ~~46 cm (~~18 inches~~.)~~ above ~~from~~ the bottom of the tank.

8-33-2~~06~~12 Switch Loading: ~~For the purpose of this Rule,~~ The ~~switch loading is the~~ loading of an organic liquid~~s~~ with a Reid vapor pressure of less than 4.0 pounds into a gasoline cargo tank ~~delivery vehicle~~ where the previous load was gasoline.

8-33-213 Total Organic Compound (TOC): Any compound of carbon including methane, excluding carbon monoxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

8-33-214 Vapor Processing Unit: Equipment designed to dispose of hydrocarbon vapors to prevent their emission into the atmosphere.

8-33-215 Vapor Recovery System: A system capable of collecting and disposing of hydrocarbon vapors to prevent their emission into the atmosphere.

8-33-2~~07~~16 Vapor ~~Tight~~ Leak Free (Terminal): Until July 1, 2009, a~~A~~ leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (l in.) from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses. Effective July 1, 2009, a gasoline bulk terminal liquid fill connector, vapor hose connector, or pressure/vacuum (P/V) valve that does not leak vapor in excess of 3,000 parts per million (ppm) (expressed as methane) or 6% of the Lower Explosive Limit (LEL), measured according to the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.

(Adopted June 1, 1994)

8-33-217 Vapor Leak Free (Gasoline Cargo Tank): A gasoline cargo tank liquid fill connector, vapor hose connector or other fitting that does not leak vapor in excess of 100% of Lower Explosive Limit (LEL), measured according to the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.

8-33-2~~08~~18 Vapor Tight (Gasoline Cargo Tank): A gasoline cargo tank that does not leak vapor in excess of ~~that does not exceed~~ the pressure decay and vapor leak standards set forth in CARB CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks*. ~~specified in the CARB "*Certification* and Test *Procedures for Vapor Recovery Systems* on Gasoline Delivery *Tanks*.~~

(Adopted January 9, 1985)

~~**8-33-209 Deleted June 1, 1994**~~

8-33-300 STANDARDS

8-33-301 ~~Final~~ Gasoline Bulk Terminal Emission Limitations:

301.1 Effective April 1, 1989, a person shall not load, or permit the loading of gasoline into or out of a gasoline bulk terminal unless a CARB certified vapor recovery system is properly connected and used. Such systems shall not emit into the atmosphere more than 9.6 grams of organic compounds per cubic meter (0.08 lbs per 1000 gallons) of organic liquid loaded. Switch loading shall be subject to this standard. Where multiple vapor processing units ~~processors~~ are used, each vapor processing unit ~~processor~~ shall be subject to this standard.

301.2 Effective January 10, 2011, emissions of non-methane organic compounds from a vapor recovery system shall not exceed 0.04 pound (lb) per 1,000 gallons of organic liquid loaded. Switch loading operations are subject to this standard. Where multiple vapor processing units are used, each vapor processing unit shall be subject to this standard.

(Amended October 7, 1987; July 20, 1988; June 1, 1994)

~~**8-33-302 Vapor Recovery System Requirement:** A person shall not install a vapor recovery system unless it is CARB-certified.~~ *(Amended October 7, 1987)*

8-33-303 Bottom Fill Requirement: Gasoline cargo tank ~~Delivery vehicle~~ loading operations at gasoline bulk terminals shall be accomplished by bottom fill.

(Amended October 7, 1987)

8-33-304 Gasoline Cargo Tank ~~Delivery Vehicle~~ Requirements: An owner or operator of a ~~G~~gasoline cargo tank ~~delivery vehicles~~ ~~are subject to~~ must comply with the following requirements:

304.1 Vapor Integrity Requirement: An owner or operator of a gasoline cargo tank ~~person~~ shall only ~~not~~ operate, or allow the operation of, a gasoline cargo tank ~~delivery vehicle~~ ~~unless~~ that displays a valid State of California decal~~s~~, as required by Section 41962 of the Health and Safety Code, and ~~which~~ attests to the vapor integrity of the cargo tank~~, are displayed~~.

304.2 Vapor Recovery Requirement: Any gasoline cargo tank ~~delivery vehicle~~ loading into or out of~~at~~ a gasoline bulk terminal ~~facility subject to the requirements of Section 8-33-301~~ shall be equipped with and use a vapor recovery system certified pursuant to Section 41962 of the California Health and Safety Code.

304.3 Deleted October 7, 1987.

304.4 Purging Requirement: An owner or operator of a gasoline cargo tank ~~person~~ shall not purge gasoline vapor from the cargo ~~the~~ tank ~~of a delivery vehicle~~ to the atmosphere, at any time.

304.5 Drainage Requirement: An owner or operator of a gasoline cargo tank shall not drain or spill liquid gasoline from the cargo tank, discard it in sewers, store it in open containers, or handle it in any other manner that would result in its evaporation to the atmosphere.

304.6 Vapor Tight Requirement: The gasoline cargo tank shall be vapor tight (gasoline cargo tank).

304.7 Vapor Leak Requirement: Gasoline cargo tank liquid fill and vapor return connectors shall be vapor leak free (gasoline cargo tank). The cargo tank owner or operator must notify the bulk terminal personnel immediately if the product or vapor connectors do not meet these vapor leak requirements.

304.8 Liquid Leak Requirements: Gasoline cargo tank liquid fill and vapor return connectors shall be liquid leak free. The cargo tank owner or operator must notify the bulk terminal personnel immediately if the product or vapor connectors do not meet these liquid leak requirements.

304.9 Compatible Connectors Requirement: Effective July 1, 2009, an owner or operator of a gasoline cargo tank shall only load the gasoline cargo tank at a gasoline bulk terminal if the gasoline cargo tank product and vapor connectors are compatible with the associated fittings of the gasoline bulk terminal.

304.10 Vapor Hose Storage Requirement: Effective January 10, 2011, an owner or operator of a gasoline cargo tank shall return the bulk terminal's vapor recovery hose to its hanger when not in use.

304.11 Maintenance Requirement: An owner or operator of a gasoline cargo tank shall maintain all equipment associated with the gasoline cargo tank in good working order.

(Renumbered, Amended January 9, 1985, October 7, 1987)

8-33-305 **Gasoline Bulk Terminal ~~Equipment~~ Maintenance and Repair:** An owner or operator of a gasoline bulk terminal shall comply with the following requirements:

305.1 All gasoline bulk terminal equipment associated with delivery, ~~and~~ loading and vapor recovery operations shall be ~~maintained to be leak free, vapor tight and~~ in good working order.

305.2 Effective January 10, 2012, prior to any operational procedure, maintenance and/or repair on the product or vapor hoses that requires opening the hoses to the atmosphere, a gasoline bulk terminal owner or operator shall transfer any retained liquid gasoline in these hoses to either a portable maintenance container equipped with liquid and vapor hose connectors or to a slop tank through fixed piping or a liquid hose connector. The cover, seal, lid, or connector shall be in a closed position at all times except when the device is in use for liquid transfer, inspection, maintenance, or repairs.

305.3 Any portable maintenance container or slop tank hose connectors shall be vapor leak free (terminal) and liquid leak free.

305.4 Backpressure monitors installed pursuant to Section 8-33-309.10 and 309.11 shall be serviced following the manufacturer's specifications and maintained in good working order. Backpressure monitors shall be calibrated as specified by the manufacturer or annually, whichever is more frequent.

8-33-306 **Operating Practices:** An owner or operator of a gasoline bulk terminal ~~Gasoline~~ shall not ~~be~~ drain or spill~~ed~~ liquid gasoline, discard~~ed~~ it in sewers, store~~d~~ it in open containers, or handle~~d~~ it in any other manner that would result in its evaporation to the atmosphere.

8-33-307 Loading Practices: ~~Loading operations which use vapor processing equipment shall be operated in such a manner that the vapor processing capacity is not exceeded.~~

307.1 Compatible Connectors Requirement: Effective July 1, 2009, an owner or operator of a gasoline bulk terminal shall inform all gasoline cargo tank owners or operators allowed to load at their facility of the liquid and vapor hose connectors required, that each cargo tank shall be allowed to only use compatible connectors, and that use of compatible connectors is necessary for continued access to the bulk terminal.

307.2 An owner or operator of a gasoline bulk terminal shall not load, or permit the loading of gasoline into or out of a gasoline bulk terminal unless a CARB-certified vapor recovery system, or a vapor recovery system for which a complete application for certification has been submitted to CARB, is properly connected and used.

8-33-308 Vapor Storage Tank ~~Diaphragm~~ Requirements: An owner or operator of a vapor storage tank at a gasoline bulk terminal is subject to the following requirements:

308.1 Diaphragms used in vapor storage tanks shall be maintained such that the concentration of total organic compound emissions ~~from~~ in the airspace above the diaphragm is less than ~~do not exceed a concentration of~~ 3,000 parts per million (ppm) expressed as methane, or 6% of the Lower Explosive Limit ~~and 6.8 kilograms (15 pounds) per day~~.

308.2 Effective January 10, 2011, total organic compound concentrations in the airspace above the diaphragm shall be monitored and recorded with a hydrocarbon analyzer weekly when the vapor storage tank is in service, during a period when gasoline loading is in progress.

(Amended October 7, 1987)

8-33-309 Gasoline Bulk Terminal Vapor Recovery System Requirements ~~- Loading Rack~~: Vapor recovery systems are subject to the following requirements:

309.1 Organic compound emissions from each delivery and loading operation shall be captured and controlled by a CARB Certified Vapor Recovery System.

309.2 ~~The~~ Vapor recovery systems shall be operated and maintained ~~and operated in a manner that prevents~~ such that the gauge pressure ~~in the delivery~~ at the cargo tank / vapor hose interface does not ~~from~~ exceed~~ing~~ ~~46cm (~~18.0 inches~~.)~~ of water column during product loading operations.

309.3 Vapor recovery systems shall be operated and maintained in good working order pursuant to the operating conditions specified in the system's CARB certification.

309.4 Vapor recovery systems shall be tested annually to ensure compliance with Section 8-33-301.

309.5 Vapor Leak Requirement: Gasoline bulk terminal liquid fill connectors, vapor return connectors, and pressure/vacuum valves shall be vapor leak free (terminal).

309.5.1 A violation of this section shall not occur if a connector leak is discovered by the terminal owner or operator and, within 8 hours of discovery of the leak, the connector is either (1) repaired and re-inspected to be leak-free (terminal), or (2) taken out of service. A connector taken out of service shall not be returned to service until it is repaired and re-inspected to be leak-free (terminal).

309.5.2 A violation of this section shall not occur if a P/V valve leak is discovered by the terminal owner or operator and, within 72 hours of discovery of the leak, the P/V valve is either (1) repaired and re-inspected to be leak free (terminal) or (2) taken out of service. A P/V valve taken out of service shall not be returned to service until it is repaired and re-inspected to be leak-free (terminal).

309.6 Liquid Leak Requirements: Gasoline bulk terminal liquid fill and vapor return connectors shall be liquid leak free.

309.6.1 A violation of this section shall not occur if a leak is discovered by the terminal owner or operator and, within 8 hours of discovery of

the leak, the connector is either (1) repaired and re-inspected to be liquid leak-free, or (2) taken out of service. A connector taken out of service shall not be returned to service until it is repaired and re-inspected to be liquid leak-free.

309.7 Effective January 10, 2011, vapor recovery system piping must include a block valve or vapor check valve on the bulk terminal piping connection to each vapor hose, and a poppet valve connector at the end of each vapor hose.

309.8 Effective January 10, 2011, the liquid fill hose connector and vapor hose connector seals and P/V valves shall be inspected daily using sight, sound and smell, and checked with a hydrocarbon analyzer weekly to ensure each connector and P/V valve is liquid leak free and vapor leak free (terminal). Any leaks requiring repair shall be re-inspected to ensure they are vapor leak free (terminal). All visual and hydrocarbon analyzer inspection, corrective actions and re-inspection results shall be recorded.

309.9 Effective January 10, 2011, each vapor hose shall have a hanger available to hang the vapor return hose off of the ground out of the driveway path when not in use.

309.10 Effective January 10, 2011, a backpressure monitor shall be installed on the vapor collection piping of each loading rack. The backpressure monitors shall be located on the fixed vapor piping as close to the vapor hose connectors as feasible. Alternate locations may be utilized subject to prior approval by the APCO. Backpressure monitors shall be correlation tested annually, with pressure measured at the loading rack / cargo tank interface. The APCO (Attention: Source Test) shall be notified at least seven (7) days prior to the correlation test.

309.11 Effective January 10, 2011, each gasoline bulk terminal shall install one of the following devices on each loading rack:

309.11.1 An alarm system that activates an audio or visual alarm, and records the event when any backpressure monitor indicates a pressure exceeding 16.0 inches of water column at the cargo tank/vapor hose interface. If the pressure exceeds 18.0 inches of water column at the cargo tank/vapor hose interface, the alarm system shall activate an additional audio or visual alarm and record the event.

309.11.2 An automatic lockout system that deactivates product loading at the conclusion of any loading event during which the backpressure monitor indicates a pressure exceeding 18.0 inches of water column at the cargo tank/vapor hose interface.

309.11.3 An alternate system that provides equivalent assurance that backpressures are monitored and limited to 18 inches water column at the cargo tank/vapor hose interface

309.12 Effective January 10, 2011, if the backpressure exceeds 18.0 inches of water column at any vapor return hose/cargo tank interface, the terminal operator shall finish the loading event, then shutdown the affected loading arm(s) and affected portion(s) of the vapor recovery system, and notify the APCO of the pressure event within 24 hours. The affected loading arm(s) and portion(s) of the vapor recovery system shall remain shutdown, or operated at a reduced rate until the cause of the pressure event has been determined and corrective actions have been completed. All excess backpressure events, responses, results of investigations, and corrective actions taken shall be recorded.

309.13 Effective January 10, 2011, each gasoline bulk terminal shall implement parametric monitoring to ensure proper performance of its vapor processing unit(s) to meet the mass emission limit in 8-33-301.2, or permit limit, whichever is lower, using one of the following approaches:

309.13.1 Non-methane organic compound concentrations at the outlet of the vapor recovery system shall be continuously monitored and

recorded. The monitor shall be maintained and operated in accordance with Regulation 1, Section 523: Parametric Monitoring and Recordkeeping Procedures, §523.1, §523.2, §523.4 and §523.5. The sample must be analyzed at least every 60 seconds, with results averaged over four hours. The owner or operator shall calculate a parametric concentration limit for the monitor to provide an early indication that the vapor recovery system may not be performing adequately. The parametric concentration limit shall be based on the most recent source test results and the applicable gasoline bulk terminal mass emission limit and shall be calculated within 60 days of the source test. The following equation shall be utilized to calculate the parametric concentration limit:

$$C_{\max} = \frac{(PM_L)}{(MW_S)}(3183800)$$

Where:

C_{max} = Parametric concentration limit expressed as the instrument span gas utilized, parts per million (ppm)

PM_L = Permitted mass emission limit expressed as pounds per thousand gallons loaded, (lb./1000 gal).

MW_S = Molecular weight of the span gas utilized, pounds per pound mole

(3183800) is a multiplying factor that represents a combination of terms consisting of conversion factors for decimal fraction to percent, percent to parts per million, the molar volume, gallons to cubic feet, pounds per thousand gallons and a 10% tolerance.

309.13.2 An alternate parametric monitoring protocol that satisfies 40 CFR Part 63, Subpart R, §63.427(a), (b), and (c), and/or 40 CFR Part 63, Subpart BBBBBB, §63.11092(b), (c), and (d), as applicable; and meets the requirements in Regulation 1, Section 523: Parametric Monitoring and Recordkeeping Procedures, §523.1, §523.2, §523.4 and §523.5; and is submitted to the APCO for approval by October 1, 2010.

309.14 Effective January 10, 2011, the owner or operator of the gasoline bulk terminal shall monitor the parametric limits of the vapor processing system pursuant to 8-33-309.13, and notify the APCO within 24 hours if any parameter exceeds (or goes below) the operating parameter limit. The owner or operator shall initiate an investigation into the cause of the exceedance of the parameter limit, and record the event, the results of investigation and corrective actions taken.

309.15 Effective January 10, 2011, all pressure / vacuum (P/V) valves connected to vapor recovery systems shall be accessible or equipped with permanent sample lines of at least 0.25 inches inside diameter that are situated one (1.0) centimeter (cm) from potential leakage sources at both the pressure and vent openings of the P/V valves. The sample lines shall terminate less than five feet above grade or platform access point and be equipped with sample valves. Samples shall be measured using a hydrocarbon analyzer for a duration adequate to ensure sample displacement through the sample tubing.

(Adopted January 9, 1985)

~~**8-33-310 Interim Gasoline Bulk Terminal Limitations:** Until April 1, 1989, a person shall not load or permit the loading of gasoline into or out of a gasoline bulk terminal unless a CARB certified vapor recovery system is properly connected and used. Such systems shall not emit into the atmosphere more than 66 grams of organic compounds per cubic meter (0.55 lbs per 1000 gallons) of organic liquid loaded.~~

~~Switch loading shall be subject to this standard. Where multiple processors are used, each processor shall be subject to this standard.~~

~~*(Adopted July 20, 1988; Amended June 1, 1994)*~~

8-33-400 ADMINISTRATIVE REQUIREMENTS

8-33-401 Equipment Installation and Modification: An owner or operator of a gasoline bulk terminal who installs or modifies vapor recovery system equipment at a gasoline bulk terminal shall meet the following requirements:

401.1 Comply with the requirements of Regulation 2, Rule 1.~~A person shall not install or modify stationary gasoline storage tanks greater than 1 cubic meter (260 gallons) or vapor recovery equipment, exclusive of repair, unless an authority to construct has been obtained pursuant to Section 301 of Regulation 2, Rule I. For the purposes of this rule, installation and modification does not include maintenance and repair activities.~~

401.2 Submit a complete application to CARB for certification or recertification pursuant to Section 41954 of the California Health and Safety Code before undertaking any of the following activities:

401.2.1 Operation of a new or replacement vapor recovery system.

401.2.2 Replacement or modification of equipment that would result in a greater gasoline loading capacity than the gasoline bulk terminal's CARB certified throughput limits. CARB throughput limits shall not be exceeded unless a new CARB certification is issued that permits these higher throughput limits.

401.2.3 Operation of a vapor recovery system in a mode not certified by CARB.

401.2.4 Submittal of an application for a revised District Permit to Operate.

~~**8-33-402 Implementation:** Any person who must install or modify vapor recovery equipment as required by Section 8-33-301 of this rule as amended on October 7, 1987, shall meet the following increments of progress:~~

~~(a) By April 1, 1988, submit an application to the APCO for Authority to Construct.~~

~~(b) By April 1, 1989, be in final compliance.~~

(Amended October 7, 1987; December 2, 1987)

8-33-403 Bulk Terminal Monitoring, Inspection, Notification and Reporting Requirements: An owner or operator of a gasoline bulk terminal shall develop and submit for APCO approval by October 1, 2010 a monitoring, inspection, notification and reporting plan that meets the following requirements, as applicable, and implement the approved plan on or before January 10, 2011:

403.1 40 CFR Part 60, Subpart XX, §60.502.

403.2 40 CFR Part 63, Subpart R, §63.424, §63.425, §63.427 and §63.428.

403.3 40 CFR Part 63, Subpart BBBBBB, §63.11087, §63.11088, §63.11089, §63.11092, §63.11093, §63.11094 and §63.11095.

403.4 Sections 8-33-309.8, 309.11, 309.12, and 309.14.

8-33-500 MONITORING AND RECORDS

8-33-501 Burden of Proof: The burden of proof of eligibility for exemptions from this rule is on the applicant. Persons seeking ~~such~~ an exemption under this rule shall maintain adequate records and furnish them to the APCO upon request.

8-33-502 Vapor Storage Tank Emissions Records: Any person subject to the requirements of Section 8-33-308.2 shall maintain for a period of at least five (5) years a record of the weekly vapor storage tank emission checks.

8-33-503 Annual Source Test: The gasoline bulk terminal owner or operator shall conduct an annual source test pursuant to Section 8-33-309.4 not less than 9 months, but less than 15 months from the previous source test, in accordance with the provisions in Section 8-33-601. Prior to conducting an annual source test, the APCO (Attention: Source Test) shall be notified at least seven (7) days prior to the test. A copy of the final report including raw data sheets shall be submitted to the APCO (Attention:

Source Test) within 60 days of the completed test. The gasoline bulk terminal owner or operator shall retain on the site for a period of at least five (5) years a copy of the final report for each annual source test.

8-33-504 Pressure/Vacuum Valve, Liquid Fill and Vapor Hose Connector Leak Check Records: Any person subject to the requirements of Section 8-33-309.8 shall maintain for a period of at least five (5) years a record, including date and time, of the P/V valve and hose connector leak checks, repairs made and re-inspection results.

8-33-505 Loading Rack Backpressure Records: Any person subject to the requirements of Section 8-33-309.11 and 309.12 shall maintain for a period of at least five (5) years a record of the date and time of high-pressure events that exceed the standards or any P/V valve release. The records shall identify the affected vapor arm(s) and the pressure or alarm status each time the high-pressure alarm system activates. The records shall also include a description of the actions taken by the gasoline bulk terminal owner or operator to cease each release or high pressure event, results of investigations to determine causes, and corrective actions taken.

8-33-506 Parametric Correlation Records: The gasoline bulk terminal owner or operator shall retain on site for a period of at least five (5) years of records of vapor recovery system pressure correlation tests and vapor processing unit parametric variable limits and their derivation, as required by Sections 8-33-309.10 and 8-33-309.13.

8-33-507 Parametric Variable Monitoring Records: The gasoline bulk terminal owner or operator shall retain on site for a period of at least five (5) years a record of events where parametric limits were exceeded (or not met), results of investigations to determine causes of such events, and corrective actions taken, as required by 8-33-309.14.

8-33-600 MANUAL OF PROCEDURES

8-33-601 Emission Rate Determination ~~(Vapor Processing Systems)~~: Emissions of non-methane organic compounds from ~~The means by which mass emission rates of~~ vapor recovery ~~processing~~ systems shall be determined in accordance with ~~systems are set forth in~~ the Manual of Procedures, Volume IV, ST-34, CARB Test Procedure TP-203.1 or EPA Method 25.

(Amended October 7, 1987; June 1, 1994)

~~**8-33-602 Emission Rate Determination (Vapor Balance System):** The means for determining mass emission rates from vapor balance systems are set forth in the Manual of Procedures, Volume IV, ST-3.~~

8-33-603 Back Pressure Determination from Vapor Recovery Systems ~~Loading Pressure~~: The back pressure from vapor recovery systems during loading of gasoline cargo tanks shall be determined in accordance with ~~means of determining gauge pressure in the delivery truck are set forth in~~ the Manual of Procedures, Volume IV, ST-34.

(Adopted January 9, 1985; Amended June 1, 1994)

8-33-604 Vapor Tight ~~—~~(Gasoline Cargo Tanks) ~~Delivery Vehicles~~: The determination of vapor tight status for gasoline cargo tanks shall be in accordance with the Manual of Procedures, Volume IV, ST-33 (or CARB Procedure TP-204.1 or TP-204.2), and CARB Procedure TP-204.3.~~means for determining vapor integrity for delivery vehicles are set forth in the Manual of Procedures, Volume IV, ST-33.~~

(Adopted October 7, 1987)

8-33-605 Analysis of Samples: Reid vapor pressure analyses shall be conducted in accordance with the Manual of Procedures, Volume III, Method 13, the most current version of ASTM D323, or the equivalent method described in California Code of Regulations Title 13, Section 2297. ~~Samples of gasoline as specified in Section 8-33-203 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 13.~~

(Renumbered January 9, 1985; October 7, 1987)

8-33-606 Vapor Leak Concentration Determination: Determination of the concentration of vapor leaks shall be conducted in accordance with the procedure set forth in CARB TP-204.3, *Determination of Leak(s).*

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REGULATION 8
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GASOLINE BULK PLANTS
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(Adopted October 7, 1987)

8-39-100 GENERAL

8-39-101 Description: The purpose of this Rule is to limit emissions of organic compounds associated with~~from~~ gasoline transfer operations at gasoline bulk plants and organic compounds from gasoline cargo tanks~~delivery vehicles~~.

(Amended June 1, 1994)

~~**8-39-110 Exemptions**~~

8-39-111 Exemption, Cargo Tanks~~Delivery Vehicle Exemptions~~: The requirements of S~~ubs~~ections 8-39-304.1, ~~and~~ 304.2, 304.3, and 304.~~3~~6 do not apply to gasoline cargo tanks ~~delivery vehicles which~~that deliver exclusively to:

111.1 Storage tanks with an actual capacity of less than 250 gallons.

111.~~1~~2 Storage tanks installed prior to February 18, 1987, with an annual throughput of less than ~~227 cubic meters (~~60,000 gallons~~)~~, provided the storage tanks ~~which were not equipped with~~ are exempt from Phase I requirements pursuant to Regulation 8, Rule 7~~vapor recovery as of July 1, 1983~~.

111.~~2~~3 Storage tanks with a storage capacity of less than ~~2.2 cubic meters (~~550 gallons~~)~~ used primarily for the refueling of implements of husbandry as defined in Division 16, Chapter 1, of the California Vehicle Code, provided such tanks are equipped with a submerged fill pipe.

111.~~3~~4 Storage tanks where the APCO determines that the Phase I gasoline vapor recovery requirements identified in Regulation 8, Rule 7 are ~~is~~ not feasible.

(Amended June 1, 1994)

8-39-112 Exemption, Gasoline Bulk Plants Without Phase I Vapor Recovery ~~Delivery to Exempt Facilities~~: ~~The requirements of Section 8-39-302 do not apply to b~~Bulk gasoline plants that ~~distribution facilities which~~ load exclusively to gasoline cargo tanks ~~delivery vehicles~~ servicing stationary tanks without Phase I vapor recovery unit(s) pursuant to Section 8-39-111.2 ~~which are exempt from Phase I as defined in Section 8-39-209 provided that submerged fill is used.~~ are exempt from the requirements of Sections 8-39-302, 307.2, 308.1 and 401.2.

8-39-113 Exemption, Tank Gauging and Inspection ~~Exemption~~: Any gasoline cargo tank may be opened for gauging or inspection ~~when loading operations are not in progress,~~ provided that ~~such~~ the tank is not pressurized or being loaded.

8-39-114 Exemption, Maintenance and Repair ~~Exemption~~: The requirements of Sections 8-39-304.4, 304.5, and 306 shall not apply to liquid gasoline spills and vapor leaks resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of gasoline into the atmosphere to the greatest extent practicable.

8-39-115 Exemption, CARB Certification: CARB certification requirements in this Rule do not apply to vapor recovery equipment or systems where the gasoline bulk plant owner or operator demonstrates that CARB has determined that such equipment or systems are not required to be CARB certified.

8-39-116 Limited Exemption, Aviation Gasoline: The distribution of aviation gasoline to and from bulk plants:

115.1 is exempt from this Rule's CARB certification requirements of the vapor recovery system.

115.2 is exempt from the requirements of Sections 8-39-304.5 and 306 when sampling is required for quality assurance.

8-39-200 DEFINITIONS

8-39-201 **CARB Certified Vapor Recovery System:** A gasoline bulk plant vapor recovery system that ~~which~~ has a valid ~~been~~ certification~~ed~~ issued by the California Air Resources Board (CARB), pursuant to Section 41954 of the California Health and Safety Code.

8-39-20~~3~~2 **Gasoline:** Any ~~P~~petroleum distillate~~s~~, including aviation gasoline and additives, that has ~~used as motor fuel with~~ a Reid vapor pressure of ~~greater than~~ four (4.0) pounds or greater.

8-39-20~~2~~3 **Gasoline Bulk Plant:** A storage and distribution~~ing~~ facility that ~~which~~ receives gasoline by gasoline cargo tanks, ~~truck, stores it in stationary tanks,~~ and loads it into gasoline cargo tanks ~~trucks~~ for delivery to service stations and ~~or~~ other distribution points.

8-39-204 **Gasoline Cargo Tank:** Any container, including its associated pipes and fittings, that is attached to a vehicle used to transport gasoline and is required to be certified in accordance with Section 41962 of the California Health and Safety Code.

8-39-20~~4~~5 **Liquid Leak Free:** A liquid fill connector or vapor hose connector that does not leak liquid ~~leak~~ in excess of three drops per minute, or 10 mililiters per disconnect averaged over three consecutive disconnects, as set forth in CARB CP-202, *Certification Procedure for Vapor Recovery Systems of Bulk Plants* for gasoline bulk plant connectors, or CARB CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks* for gasoline cargo tank connectors.~~of less than four drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect., averaged over three disconnects.~~

8-39-206 **Loading Event:** Transferring liquid gasoline into and receiving vapors from a gasoline delivery vehicle, including all individual cargo tanks and compartments.

8-39-2~~1~~07 **Non-Methane Organic Compound (NMOC):** Any compound of carbon, excluding methane, carbon monoxide, carbonic acid, metallic carbides, ~~or~~ metallic carbonates and ammonium carbonate.

(Adopted June 1, 1994)

8-39-208 **Portable Maintenance Container:** A portable vessel or tank with a capacity of less than 250 gallons, equipped with liquid and vapor hose connectors that temporarily stores gasoline.

8-39-209 **Reid Vapor Pressure:** The vapor pressure of an organic liquid at 100 degrees Fahrenheit, except liquefied petroleum gases, as determined in accordance with the Manual of Procedures, Volume III, Method 13, the most current version of ASTM D323, or the equivalent method described in California Code of Regulations Title 13, Section 2297.

8-39-210 **Slop Tank:** Any permanent or fixed container that has the primary function of temporarily storing petroleum product and other liquids that have been collected during maintenance or loading operations and are not loaded into a gasoline cargo tank.

8-39-211~~5~~ **Submerged Fill Pipe:** Any storage tank fill ~~discharge~~ pipe ~~or nozzle~~ ~~which~~ that meets either of the following conditions:

209~~5~~.1 If ~~Where~~ the tank is filled from the top, the end of the discharge pipe is ~~or nozzle must be~~ totally submerged when the liquid level is six ~~15 cm~~ (6 ~~in.~~) inches above ~~from~~ the bottom of the tank.

209~~5~~.2 If ~~Where~~ the tank is filled from the side, the discharge pipe is ~~or nozzle must be~~ totally submerged when the liquid level is ~~46 cm (~~18 inches~~.)~~ above ~~from~~ the bottom of the tank.

8-39-2~~06~~12 **Switch Loading:** ~~For the purpose of this Rule,~~ The ~~switch loading is the~~ loading of an organic liquid~~s~~ with a Reid vapor pressure of less than 4.0 pounds into a gasoline cargo tank ~~delivery vehicle~~ where the previous load was gasoline.

8-39-213 **Total Organic Compound (TOC):** Any compound of carbon, including methane, excluding carbon monoxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

8-33-214 **Vapor Processing Unit:** Equipment designed to dispose of hydrocarbon vapors to prevent their emission into the atmosphere.

8-39-215 **Vapor Recovery System:** A system capable of collecting and disposing of hydrocarbon vapors to prevent their emission into the atmosphere.

8-39-2~~07~~16 **Vapor ~~Tight~~ Leak Free (Bulk Plant):** Until July 1, 2009, a~~A~~ leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (l in.) from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses. Effective July 1, 2009, a gasoline bulk plant liquid fill connector, vapor hose connector, or pressure/vacuum (P/V) valve that does not leak vapor in excess of 3,000 parts per million (ppm) (expressed as methane) or 6 % of the Lower Explosive Limit (LEL), measured according to the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.

8-39-217 **Vapor Leak Free (Gasoline Cargo Tank):** A gasoline cargo tank liquid fill connector, vapor hose connector or other fitting that does not leak vapor in excess of 100% of Lower Explosive Limit (LEL), measured according to the procedure set forth in CARB TP-204.3, *Determination of Leak(s)*.

8-39-2~~08~~18 **Vapor Tight (Gasoline Cargo Tank):** A gasoline cargo tank that does not leak vapor in excess of ~~that does not exceed~~ the pressure decay and vapor leak standards set forth in CARB CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks*. ~~specified in the CARB "*Certification* and Test *Procedures for Vapor Recovery Systems* on Gasoline Delivery *Tanks*.~~

~~**8-39-209** **Deleted June 1, 1994**~~

8-39-300 **STANDARDS**

~~**8-39-301** **Phase I Requirements:** A person shall not transfer or allow the transfer of gasoline from gasoline delivery vehicles into stationary tanks at gasoline bulk plants unless a CARB certified Phase I vapor recovery system is used.~~

8-39-302 **Gasoline Bulk Plant Emission Limitations:** ~~A person shall not load or permit the loading of gasoline into or out of a gasoline bulk plant unless a CARB certified vapor recovery system is properly connected and used.~~ Emissions of non-methane organic compounds from a gasoline bulk plant vapor recovery system shall not exceed ~~Such systems shall not emit into the atmosphere more than 60 grams of organic compounds per cubic meter (~~0.50 pounds per l,000 gallons~~)~~ of organic liquid loaded. Switch loading operations are ~~shall be~~ subject to this standard. Where multiple vapor processing units ~~ors~~ are used, each vapor processing unit ~~or~~ shall be subject to this standard.

(Amended June 1, 1994)

~~**8-39-303** **Vapor Recovery System Requirements:** Vapor recovery systems installed at gasoline bulk plants shall be subject to CARB certification.~~

8-39-304 **Gasoline Cargo Tank ~~Delivery Vehicle~~ Requirements:** An owner or operator of a ~~G~~gasoline cargo tank ~~delivery vehicles are subject to must~~ shall comply with the following requirements:

304.1 Vapor Integrity Requirement: An owner or operator of a gasoline cargo tank ~~person~~ shall only ~~not~~ operate, or allow the operation of, a gasoline cargo tank ~~delivery vehicle unless~~ that displays a valid State of California decal~~s~~, as required by Section 41962 of the Health and Safety Code, and which attests to the vapor integrity of the cargo tank~~, are displayed~~.

304.2 Vapor Recovery Requirement: Any gasoline cargo tank ~~delivery vehicle~~ loading at a gasoline bulk plant ~~facility subject to the requirements of Section 8-39-302~~ shall be equipped with and use a vapor recovery system certified pursuant to Section 41962 of the California Health and Safety Code.

304.3 Vapor Return Requirement: An owner or operator of a gasoline cargo tank ~~person~~ shall not load at a gasoline bulk plant ~~facility~~ that is exempt from the Section 8-39-302 gasoline bulk plant emission limitation pursuant to ~~under~~ Section 8-39-112 if any portion of the gasoline cargo tank's prior ~~preceding~~ load~~, or any portion thereof,~~ was delivered to a storage tank equipped with a Phase I vapor recovery system.

304.4 Purging Requirement: An owner or operator of a gasoline cargo tank ~~person~~ shall not purge gasoline vapor from the cargo tank ~~of a delivery vehicle~~ to the atmosphere, at any time.

304.5 Drainage Requirement: An owner or operator of a gasoline cargo tank shall not drain or spill liquid gasoline from the cargo tank, discard it in sewers, store it in open containers, or handle it in any other manner that would result in its evaporation to the atmosphere.

304.6 Vapor Tight Requirement: The gasoline cargo tank shall be vapor tight.

304.7 Vapor Leak Requirement: Gasoline cargo tank liquid fill and vapor return connectors shall be vapor leak free (gasoline cargo tank). The cargo tank owner or operator must notify the bulk plant personnel immediately if the product or vapor connectors do not meet these vapor leak requirements.

304.8 Liquid Leak Requirements: Gasoline cargo tank liquid fill and vapor return connectors shall be liquid leak free. The cargo tank owner or operator must notify the bulk plant personnel immediately if the product or vapor connectors do not meet these liquid leak requirements.

304.9 Compatible Connectors Requirement: Effective July 1, 2009, an owner or operator of a gasoline cargo tank shall only load the gasoline cargo tank at a gasoline bulk plant if the gasoline cargo tank product and vapor connectors are compatible with the associated fittings of the gasoline bulk plant.

304.10 Maintenance Requirement: An owner or operator of a gasoline cargo tank shall maintain all equipment associated with the gasoline cargo tank in good working order.

8-39-305 **Gasoline Bulk Plant** ~~**Equipment**~~ **Maintenance and Repair:** An owner or operator of a gasoline bulk plant shall comply with the following requirements:

305.1 All equipment associated with gasoline delivery, ~~and~~ loading and vapor recovery operations shall be ~~maintained~~ in good working order.

305.2 Effective January 10, 2012, prior to any operational procedure, maintenance and/or repair on the product or vapor hoses that requires opening the hoses to the atmosphere, a gasoline bulk plant owner or operator shall transfer any retained liquid gasoline in these hoses to either a portable maintenance container equipped with liquid and vapor hose connectors or to a slop tank through fixed piping or a liquid hose connector. The cover, seal, lid, or connector shall be in a closed position at all times except when the device is in use for liquid transfer, inspection, maintenance, or repairs.

305.3 Any portable maintenance container or slop tank hose connectors shall be vapor leak free (bulk plant) and liquid leak free.

8-39-306 **Operating Practices:** An owner or operator of a gasoline bulk plant ~~Gasoline~~ shall not ~~be~~ drain or spill~~ed~~ liquid gasoline, discard~~ed~~ it in sewers, store~~d~~ it in open containers, or handle~~d~~ it in any other manner that would result in its evaporation to the atmosphere.

8-39-307 **Loading Practices:** ~~Loading operations which use vapor processing equipment shall be operated in such a manner that the vapor processing capacity is not exceeded.~~

307.1 Compatible Connectors Requirement: Effective July 1, 2009, an owner or operator of a gasoline bulk plant shall inform all gasoline cargo tank owners or operators allowed to load at their facility of the liquid and vapor hose connectors required, that each cargo tank shall be allowed to only use compatible connectors, and that use of compatible connectors is necessary for continued access to the bulk plant.

307.2 An owner or operator of a gasoline bulk plant shall not load, or permit the loading of gasoline into or out of a gasoline bulk plant unless a CARB-certified vapor recovery system, or a vapor recovery system for which a complete application for certification has been submitted to CARB, is properly connected and used.

8-39-308 **Gasoline Bulk Plant** **Vapor Recovery System Requirements** ~~**- Loading Rack**~~**:** Vapor recovery systems are subject to the following requirements:

308.1 Organic compound emissions from each delivery and loading operation shall be captured and controlled by a CARB Certified Vapor Recovery System.

308.2 ~~The~~ ~~v~~Vapor recovery systems shall be operated and maintained ~~and operated in a manner that prevents~~ such that the gauge pressure ~~in the delivery~~ at the cargo tank / vapor hose interface does not ~~from~~ exceed~~ing~~ ~~46 cm (~~18.0 inches~~.)~~ of water column during product loading operations.

308.3 Vapor Leak Requirement: Gasoline bulk plant liquid fill connectors, vapor return connectors, and pressure/vacuum valves shall be vapor leak free (bulk plant).

308.3.1 A violation of this section shall not occur if a connector leak is discovered by the bulk plant owner or operator and, within 8 hours of discovery of the leak, the connector is either (1) repaired and re-inspected to be leak-free (bulk plant), or (2) taken out of service. A connector taken out of service shall not be returned to service until it is repaired and re-inspected to be leak-free (bulk plant).

308.3.2 A violation of this section shall not occur if a P/V valve leak is discovered by the bulk plant owner or operator and, within 72 hours of discovery of the leak, the P/V valve is either (1) repaired and re-inspected to be leak free (bulk plant) or (2) taken out of service. A P/V valve taken out of service shall not be returned to service until it is repaired and re-inspected to be leak-free (bulk plant).

308.4 Liquid Leak Requirements: Gasoline bulk plant liquid fill and vapor return connectors shall be liquid leak free.

308.4.1 A violation of this section shall not occur if a leak is discovered by the bulk plant owner or operator and, within 8 hours of discovery of the leak, the connector is either (1) repaired and re-inspected to be liquid leak-free, or (2) taken out of service. A connector taken out of service shall not be returned to service until it is repaired and re-inspected to be liquid leak-free.

308.5 Effective January 10, 2011 a pressure gauge shall be installed on the vapor collection piping as close to the vapor hose connector as feasible. For bulk plants that utilize top loading arms, a pressure gauge shall be installed on the fixed vapor piping as close to the end or the top loading arm, as feasible.

308.6 Gauge pressure of each vapor hose shall be maintained below the CARB-certified set pressure of the pressure/vacuum valve(s) of the vapor recovery system at all times.

8-39-400 ADMINISTRATIVE REQUIREMENTS

8-39-401 Equipment Installation and Modification: An owner or operator of a gasoline bulk plant who installs or modifies vapor recovery system equipment at a gasoline bulk plant shall meet the following requirements:

401.1 Comply with the requirements of Regulation 2, Rule 1. ~~A person shall not install or modify stationary gasoline storage tanks greater than 1 cubic meter (260 gallons) or vapor recovery equipment, exclusive of repair, unless an authority to construct has been obtained pursuant to Section 301 of Regulation 2, Rule I.~~

401.2 Submit a complete application to CARB for certification or recertification pursuant to Section 41954 of the California Health and Safety Code before undertaking any of the following activities:

401.2.1 Operation of a new or replacement vapor recovery system.

401.2.2 Replacement or modification of equipment that would result in a greater gasoline loading capacity than the gasoline bulk plant's CARB certified throughput limits. CARB throughput limits shall not be exceeded unless a new CARB certification is issued that permits these higher throughput limits.

401.2.3 Operation of a vapor recovery system in a mode not certified by CARB.

401.2.4 Submittal of an application for a revised District Permit to Operate.

~~**8-39-402 Implementation:** Any person who must install or modify vapor recovery equipment as required by Section 8-39-302 of this rule shall meet the following increments of progress:~~

~~(a) By April 1, 1988 submit an application to the APCO for Authorities to Construct.~~

~~(b) By April 1, 1989, be in final compliance.~~

~~**8-39-403 Stationary Tanks:** Any person who must install Phase I vapor recovery on stationary tanks at a gasoline dispensing facility as required by the March 4, 1987 amendments to Regulation 8, Rule 7 shall meet the following increments of progress:~~

~~(a) By September 1, 1989, submit an application to the APCO for Authorities to Construct.~~

~~(b) By March 1, 1990, be in final compliance.~~

(Adopted October 7, 1987; Amended December 2, 1987)

8-39-404 Bulk Plant Monitoring, Inspection, Notification and Reporting Requirements: An owner or operator of a gasoline bulk plant shall develop and submit for APCO approval by October 1, 2010 a monitoring, inspection, notification and reporting plan that meets the following requirements, as applicable, and implement the approved plan on or before January 10, 2011:

404.1 40 CFR Part 63, Subpart R, §63.424, §63.425, and §63.428.

404.2 40 CFR Part 63, Subpart BBBBBB, §63.11087, §63.11088, §63.11089, §63.11092, §63.11093, §63.11094 and §63.11095.

8-39-500 MONITORING AND RECORDS

8-39-501 Burden of Proof: The burden of proof of eligibility for exemptions from this rule is on the applicant. Persons seeking ~~such~~ an exemption under this rule shall maintain adequate records and furnish them to the APCO upon request.

8-39-502 Biennial Source Test: The gasoline bulk plant owner or operator shall conduct a biennial source test not less than 18 months, but less than 30 months from the previous source test, in accordance with the provisions in Section 8-39-601. A copy of the final report including raw data sheets shall be submitted to the APCO (Attention: Source Test) within 60 days of the completed test. The gasoline bulk plant owner or operator shall retain on the site for a period of at least five (5) years a copy of the final report for each biennial source test.

8-39-600 MANUAL OF PROCEDURES

8-39-601 Emission Rate Determination for ~~(~~Vapor Recovery ~~Processing~~ Systems~~)~~: Emissions of non-methane organic compounds from ~~The means by which mass emission rates of~~ gasoline bulk plant vapor recovery ~~processing~~ system(s) ~~systems are measured are set forth in the~~ shall be determined in accordance with the Manual of Procedures, Volume IV, ST-34, CARB Test Procedure TP-202.1 or EPA Method 25.

(Amended June 1, 1994)

8-39-602 Emission Rate Determination for ~~(~~Vapor Balance System~~)~~: The ~~means for determining mass~~ emission rates from vapor balance systems at gasoline bulk plants shall be determined in accordance with the ~~are set forth in the~~ Manual of Procedures, Volume IV, ST-3.

8-39-603 Back Pressure Determination from Vapor Recovery System ~~Loading Pressure~~: The back pressure from vapor recovery systems during un-loading or loading of gasoline cargo tanks shall be determined in accordance with ~~means of determining gauge pressure in the delivery truck are set forth in~~ the Manual of Procedures, Volume IV, ST-34.

(Amended June 1, 1994)

8-39-604 Vapor Tight (Gasoline Cargo Tanks) ~~Delivery Vehicles~~: The determination of vapor tight status for gasoline cargo tanks shall be in accordance with ~~means for~~

~~determining vapor integrity for delivery vehicles are set forth in~~ the Manual of Procedures, Volume IV, ST-33 or CARB Procedure TP-204.1 or TP-204.2.

8-39-605 **Analysis of Samples:** Reid vapor pressure analyses shall be conducted in accordance with the ~~Samples of gasoline as specified in Section 8-39-203 shall be analyzed as prescribed in~~ the Manual of Procedures, Volume III, Method 13, the most current version of ASTM D323, or the equivalent method described in California Code of Regulations Title 13, Section 2297.

8-39-606 **Vapor Leak Concentration Determination:** Determination of the concentration of vapor leaks shall be conducted in accordance with the procedure set forth in CARB TP-204.3, *Determination of Leak(s).*

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109

BAY AREA OZONE STRATEGY
CONTROL MEASURE SS-7

BAAQMD Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles; and Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles

STAFF REPORT

March 2009

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STAFF REPORT

BAAQMD
Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles; and Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles

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I. EXECUTIVE SUMMARY

This staff report describes the amendments proposed for Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles (Regulation 8-33) and Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Delivery Vehicles (Regulation 8-39), and their expected impact on Volatile Organic Compound (VOC) emissions from gasoline bulk terminals and gasoline bulk plants. The Bay Area Air Quality Management District's (District) Bay Area 2005 Ozone Strategy identified Control Measure SS-7: "Gasoline Bulk Terminals and Plants" (SS-7) as a potential opportunity to reduce emissions of organic compounds. The proposed amendments reduce the allowable emission limit, reduce leak standards, strengthen requirements for gasoline cargo tank loading operations, and require enhanced monitoring to improve facility operations. VOC emissions will be reduced by at least 0.07 tons per day, and additional reductions will be achieved as a result of fewer episodic VOC emissions. These emissions reductions, on an average per day basis, are relatively small because many of the bulk terminals and bulk plants in the Bay Area already achieve the proposed emissions standards. However, the proposed monitoring requirements will also limit emissions by reducing the number of incidents of over pressuring vapor recovery systems during loading, which can result in significant VOC releases.

Gasoline bulk terminals and gasoline bulk plants are intermediate facilities that distribute gasoline, gasoline additives and other fuels, such as ethanol, by gasoline cargo tanks to service stations and local businesses. Gasoline bulk terminals also distribute refined fuels to gasoline bulk plants. A majority of the emissions from gasoline bulk terminals and plants are associated with vapor generated during loading of gasoline cargo tanks and vapors returned from delivery operations. Cargo tank loading operations can also release emissions through liquid leaks and from spilled product. Staff estimates that gasoline bulk terminals in the District emit a total of 0.52 tons per day (tpd) of non-methane organic compounds while gasoline bulk plants emit 0.0081 tpd. The fugitive emissions from liquid and vapor leaks from piping systems, and any episodic emissions from vapor recovery system overpressure events or failures are not included in these estimates.

Based on a review of the existing rules and District staff's experience monitoring and inspecting Bay Area gasoline bulk terminals and bulk plants, a set of amendments is proposed to Regulation 8-33 and Regulation 8-39 to reduce organic emissions, enhance the safety of gasoline bulk terminal and bulk plant operations, and improve the enforceability of the rules. The proposed amendments include:

- A reduction in the allowable emission limit; and a requirement to monitor vapor recovery system performance to ensure the vapor recovery system operates properly;
- A reduction of vapor leak standards and liquid leak standards in the rules, and a repair period to address leaks found by self inspection;

- A requirement that loading arm connectors and cargo tank vapor recovery connectors are compatible prior to gasoline loading, and meet the vapor and liquid leak standards;
- A requirement to install pressure sensors to monitor vapor collection piping backpressure, and an alarm or automatic shutdown if backpressure exceeds 18 inches water column;
- A requirement to install block or vapor check valves in each loading rack vapor collection header to minimize emissions when maintenance is required;
- A requirement that vapor hose connectors are stored out of the way of the truck driveway to prevent damage to the connectors, which can be a significant source of VOC leakage;
- A requirement to monitor vapor storage tank airspace emissions to ensure all leaks are discovered and repaired quickly;
- A requirement to install sample lines on the pressure and vacuum sides of inaccessible pressure/vacuum valves to provide ready access to check for leaks;
- A requirement to further control the release of organic compounds during operational, maintenance and repair operations.
- A requirement for an APCO-approved vapor recovery system monitoring, inspection, notification and reporting protocol.
- A requirement that plants and terminals apply for new or revised certifications of their equipment with the California Air Resources Board (CARB) if substantive changes are made to their existing equipment.
- Revision to definitions and updates to source test requirements to be consistent with federal and state requirements.

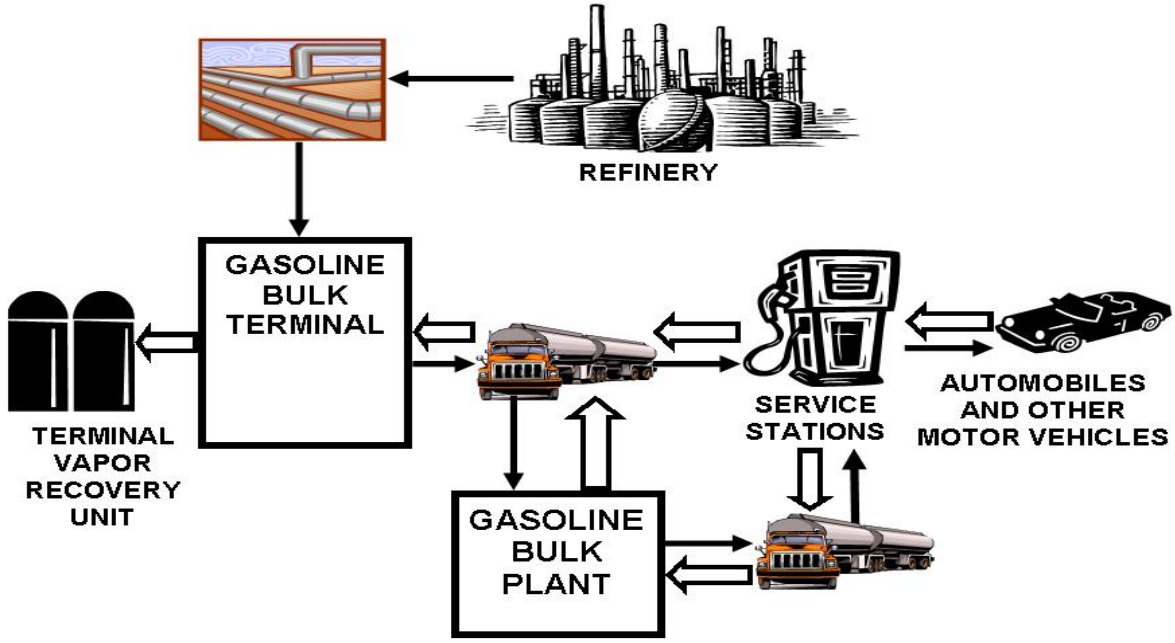
This Staff Report presents an overview of the proposed amendments to Regulation 8-33 and Regulation 8-39, and resulting reduction of an estimated 0.07 tpd VOC emissions. Improvements in inspection and handling of connectors and inspection of vapor system pressure relief valves are expected to reduce emissions by an additional 1 ton per year. Estimates of the reduction in episodic events and associated VOC emissions are difficult to quantify, but, based on District staff's monitoring and inspection experience, assuming a reasonable estimate of one less event each quarter in each of the bulk terminals, with an associated reduction of 0.02 tons per event results in an additional estimated reduction of 1 ton per year. Altogether, the amendments are estimated to result in a reduction of approximately 28 tons of VOC per year.

II. Background

A. Introduction

Gasoline bulk terminals and gasoline bulk plants are intermediate distribution centers where refined fuels are loaded into gasoline cargo tanks for delivery to gasoline dispensing facilities ("GDFs" or more commonly known as gas stations or service stations) and local businesses. Gasoline bulk terminals also deliver gasoline via cargo tank to gasoline bulk plants. Currently, there are fourteen gasoline bulk terminals in the Bay Area, one of which is not being used. There are ten active gasoline bulk plants within the District that distribute to service stations, along with two that only distribute other petroleum products (diesel, lubes, etc.), one that is available for emergency use only, and one that is out of service. Figure 1 illustrates the typical gasoline bulk terminal and bulk plant distribution system.

Figure 1
Typical Gasoline Bulk Terminal and Bulk Plant Distribution System



Notes: solid arrow indicate flow of petroleum product
Open arrow indicate flow of gasoline vapors.

Regulation 8, Rule 33 and Regulation 8, Rule 39 are focused on controlling the vapors that are displaced from cargo tanks when loaded with gasoline, as depicted by the open arrows shown in Figure 1. These vapors contain volatile organic compounds that are the precursors for ozone formation, and can also contain benzene, a toxic chemical.

B. Regulatory History

The District has a long history of regulating emissions from gasoline bulk terminals and plants. The District required installation of emission control equipment at gasoline bulk terminals in the late 1960s. In 1983, the District promulgated Regulation 8-33. The regulation currently requires terminals to install and maintain a CARB-certified vapor recovery system that emits no more than 9.6 grams of non-methane organic compounds per cubic meter of petroleum product loaded (or 0.08 pounds/1,000 gallons loaded). This standard represents a 99% reduction of organic vapors generated by loading at a gasoline terminal. Vapor recovery systems must have sufficient capacity to prevent the build up of pressure in cargo tanks during product loading. The regulation also requires the loading and delivery operations to be "leak free" and "vapor tight" as defined in the rule. The standards set in Rule 8-33, while now standard throughout California, were initially adopted in the Bay Area. The District amended Regulation 8-33 most recently in 1994.

The District promulgated Regulation 8-39 in 1987 to regulate organic emissions from gasoline bulk plants. Regulation 8-39 also requires the installation and maintenance of a CARB-certified Phase I vapor recovery system that emits less than 60 grams of non-methane organic compounds per cubic meter petroleum product loaded (or 0.5 pounds/1,000 gallons loaded). This standard represents a 94% reduction of organic vapors from a gasoline bulk plant. All equipment associated with delivery and loading operations must also be leak free and vapor tight. The District amended Regulation 8-39 most recently in 1994.

CARB tests and, if appropriate, certifies each individual vapor recovery system to the emission standards adopted by the air district in which the system is located. In addition, gasoline cargo tanks must be certified by CARB to operate in California. California Health and Safety Code Section 41962 requires that CARB set emission standards for gasoline cargo tanks and preempts the District's authority to set these standards, certify vehicles, or permit cargo tanks. While CARB conducts the annual performance test for initial certification, the District and other air districts administer and enforce pressure decay tests to check for "vapor tight" conditions on cargo tanks based upon CARB standards. Although CARB has sole authority to set cargo tank standards, CARB's pressure test methodology was developed by the District.

C. Source Description

<u>Gasoline Bulk Terminals:</u> Gasoline bulk terminals receive raw gasoline and other fuels and additives from refineries by pipeline and from marine tankers and barges, and store these petroleum distillates in tanks on site. Oxygenates such as ethanol, and some additives such as detergents and corrosion inhibitors are also delivered to terminals using gasoline cargo tanks. At the terminal's truck loading rack, cargo tank operators load gasoline and additives from the terminal's storage tanks into the delivery vehicle's cargo tanks for delivery as refined fuel. This refined gasoline goes to gasoline bulk plants, gas stations, and local businesses. A meter at the loading rack records the

amount of fuel loaded into each cargo tank. On average, each gasoline bulk terminal in the District dispenses over 800,000 gallons of refined gasoline each day.

Figure 2 is a photo of a gasoline cargo tank preparing for loading operations at the loading rack.

Figure 2
Tank Truck Connects to Vapor Hose

The gasoline bulk terminal loading rack includes:

- a liquid loading arm and cargo hose;
- a vapor recovery arm and vapor hose;
- an electrical ground line; and
- various pumps, valves, piping and, as noted above, a meter to measure the amount of fuel loaded into each cargo tank.
- Some terminals also have a slop tank, used to accommodate gasoline that does not meet specifications and occasional spills.

Gasoline cargo tank operators perform the actual hookup of the cargo tank to the electrical ground line, the vapor recovery system hose, and the bulk terminal loading hose. Operators then open the cargo tank's internal valve and load the gasoline and gasoline additive into the bottom of the cargo tank below the liquid level, once a level of gasoline is in the cargo tank. This loading is called "bottom fill" or "submerged loading," the purpose of which is to minimize the formation of gasoline vapors during the loading operation. Gasoline loaded into the cargo tanks displaces the gasoline vapors that were present in the cargo tanks prior to loading. These vapors flow from the cargo

tanks through the vapor recovery arm and cargo hose to the gasoline bulk terminal's vapor recovery system.

Gasoline Bulk Plants: Gasoline bulk plants receive and store refined fuels that are delivered from gasoline bulk terminals by delivery vehicles. Similar to the larger gasoline bulk terminals, cargo tank operators load gasoline from the bulk plant into cargo tanks at loading racks and deliver gasoline to GDFs and local businesses. In the District, gasoline bulk plants dispense approximately 2,800 gallons of gasoline in a day.

Gasoline loading operations at bulk plants are identical to loading operations performed at gasoline bulk terminals (described above) except that the gasoline vapors generated at GDFs and bulk plants are returned to the vapor space in the cargo tank by a process called "vapor balancing." Vapors from automobile tanks are collected through vapor recovery nozzles at GDFs when automobiles are filled with gasoline. Additional vapors also can also result from evaporation of liquids in storage tanks. These vapors are collected and returned to the cargo tanks when gasoline is delivered from the cargo tanks to GDF storage tanks.

D. Current Technology for Reducing VOC Emissions

Vapor Recovery Systems: Gasoline vapors from gasoline dispensing facilities (GDF) and bulk plants are contained in the vapor space of cargo tanks using the process of vapor balancing. These vapors are returned to gasoline bulk terminals. Cargo tanks are filled with vapor when they return to the gasoline bulk terminal for their next load of gasoline. The terminal loads liquid gasoline into the cargo tank, and displaces the vapor in the cargo tank through the vapor collection system to the vapor processing units for disposal. Vapor processing units dispose of the organic compounds by either recycling them, or burning them in an incinerator.

A vapor recovery system consists of:

- one or more vapor collection arms and vapor hoses at each loading rack;
- vapor recovery system piping to route the vapors to vapor processing unit(s); and
- one or more vapor processing units to dispose of the organic vapors.

In the Bay Area, gasoline bulk terminals utilize several types of vapor recovery systems including carbon adsorption/liquid absorption, thermal incineration, and at one terminal, a compressor system that recycles vapors back into the adjacent refinery fuel gas system.

Carbon adsorption/liquid absorption vapor recovery systems: Ten gasoline bulk terminals in the District have vapor recovery systems that consist of vapor recovery piping from each of the loading racks, and a pair of carbon adsorption or liquid absorption units to recover organic compounds from gasoline vapors. These systems are typically used at bulk terminals affiliated with Bay Area refineries. Figure 3 is a photo of a carbon adsorption/liquid adsorption vapor processing unit (VPU). Most VPUs

utilize two carbon adsorption beds. The first bed adsorbs organic compounds from the gasoline vapors onto carbon, and then the "cleansed" air vents to the atmosphere. While one carbon adsorption bed operates, the second carbon adsorption bed undergoes regeneration.

Figure 3
Example of Terminal Vapor Processing Unit

The carbon is regenerated to remove the organic compounds from the carbon for re-use. A vacuum pump on the carbon bed creates a negative pressure and desorbs the organic compounds. The desorbed organic compounds condense into liquid and are returned to the refinery for processing. Any remaining vapors are processed in the recovery column where the vapors are absorbed through contact with a gasoline stream. The regenerated carbon can then be used again to adsorb vapors.

The regeneration process of switching from one carbon bed to another occurs either after a fixed time period (typically every 15 minutes), after a fixed amount of product has been loaded, or after a fixed amount of hydrocarbon vapors have been adsorbed onto the carbon bed as determined using a hydrocarbon analyzer measuring the inlet concentrations to the carbon bed. One system uses hydrocarbon analyzer readings at the outlet of the carbon bed to trigger the switch to the other carbon bed, and start the regeneration cycle. These adsorptions systems are very effective, with control efficiencies ranging from 90 to 99+%. The Chevron Pascagoula Marketing Terminal in south Mississippi reports that it recovers more than one gallon of gasoline for every 1,000 gallons of gasoline loaded into cargo tanks using this type of vapor recovery system.

Thermal incineration vapor recovery systems: Some gasoline bulk terminals burn their hydrocarbon vapors rather than capture and recycle them. This approach is called thermal incineration. Two gasoline terminals in the Bay Area operate thermal incinerators. Both thermal incinerators consist of a combustion chamber to combust hydrocarbon vapors, aided by auxiliary fuel if necessary. Gasoline vapors are heated to ignition temperature and burned to carbon dioxide and water. The destruction efficiency of thermal oxidizers ranges from 90% to 99+%. The destruction efficiency depends upon the units' combustion temperatures and the residence time of gasoline vapors in the combustion chamber. The disadvantage of this approach is that incinerators contribute to greenhouse gas generation because supplemental fuel along with these hydrocarbon vapors is burned with little or no energy recovery mechanism used to generate useful work from these fuel sources.

One terminal in the Bay Area compresses its gasoline vapors, and recycles the vapors to the terminal's adjacent refinery fuel gas system. This approach uses the refinery furnaces as a type of thermal incinerator, with the inherent advantage of obtaining useful heat when the vapors are burned.

III. Proposed Rule Amendments

There are twelve amendments proposed to Rules 8-33 and 8-39. The purpose of these amendments is to reduce organic compound emissions, clarify applicability of the rules, improve enforceability of the rules, and enhance the safety of the bulk terminal and bulk plant operations. The proposed amendments include:

- A reduction in the allowable emission limit; and a requirement to monitor vapor recovery system performance to ensure the vapor recovery system operates properly;
- A reduction of vapor leak standards and liquid leak standards in the rules, and a repair period to address leaks found by self inspection;
- A requirement that loading arm connectors and cargo tank vapor recovery connectors are compatible prior to gasoline loading, and meet the vapor and liquid leak standards;
- A requirement to install pressure sensors to monitor vapor collection piping backpressure, and an alarm or automatic shutdown if backpressure exceeds 18 inches water column;
- A requirement to install block or vapor check valves in each loading rack vapor collection header to minimize emissions when maintenance is required;
- A requirement that vapor hose connectors are stored out of the way of the truck driveway to prevent damage to the connectors, which can be a significant source of VOC leakage;
- A requirement to monitor vapor storage tank airspace emissions to ensure all leaks are discovered and repaired quickly;
- A requirement to install sample lines on the pressure and vacuum sides of inaccessible pressure/vacuum valves to provide ready access to check for leaks;

- A requirement to further control the release of organic compounds during operational, maintenance and repair operations.
- A requirement for an APCO-approved vapor recovery system monitoring, inspection, notification and reporting protocol.
- A requirement that plants and terminals apply for new or revised certifications of their equipment with CARB if substantive changes are made to their existing equipment.
- Revision to definitions and updates to source test requirements to be consistent with federal and state requirements.

Enhanced monitoring and compliance is central to most of the proposed amendments. The proposals for lower emission limits will require rigorous monitoring to prevent performance deterioration of the vapor processing system, and resulting increased emissions over an extended period of time. Other proposed amendments also improve the ability of terminal and plant operators and District staff to monitor compliance. These other amendments will indirectly reduce emissions, but such reductions are very difficult to quantify. Some of these expected episodic emissions reductions are not included the quantitative analysis of the overall total emissions reductions.

A. Reduction in Emission Limits

The proposed amendments modify the emission limit of CARB-certified gasoline bulk terminal vapor recovery systems from a limit of 0.08 pounds of non-methane organic compounds per 1,000 gallons of product loaded to a limit of 0.04 pounds of non-methane organic compounds per 1,000 gallons of product loaded. While this appears to reduce emissions by half, all terminals already meet these more stringent standards in normal operation.

Currently, eight of the fourteen gasoline bulk terminals in the San Francisco Bay Area have District permit conditions that impose vapor recovery system emission limits of 0.02 to 0.04 pounds of non-methane organic compounds per 1,000 gallons of product loaded based on Best Available Control Technology (BACT) considerations. The remaining five bulk terminals (one bulk terminal is currently out of service) have permit conditions that limit organic compound emissions to the current Regulation 8, Rule 33 limit of 0.08 pounds of organic compounds per 1,000 gallons of gasoline loaded. The proposed amendments lower the organic compound emission limit to assure that all terminals maintain their vapor recovery equipment so that it continues to work efficiently and keeps emissions to a minimum.

Source tests conducted at twelve of the terminals demonstrate that the facilities already meet or exceed the proposed emission limit. The thirteenth terminal is not currently loading gasoline, but historical source tests indicate it can also meet the 0.04 lbs. /1000 gallons loaded. The fourteenth terminal is not currently in use.

Seven terminals have emission limits set by permit conditions that are at or below 0.04 lbs./1000 gal. The lower emission limit is estimated to reduce VOC emissions by approximately 0.06 tpd of organic compounds. This estimate is based on the recognition that while the five remaining terminals are currently capable of achieving 0.04 lbs./1000 gal. when operating effectively, they can occasionally have equipment or instrumentation problems that degrade their performance. Enhanced monitoring, combined with the more restrictive limit of 0.04 lbs./1000 gal. will require these five terminals to maintain their vapor recovery systems at the higher level of performance effectiveness. The District anticipates that terminals do not need to expend any capital or install additional equipment in order to achieve these emissions standards. However they may have to review maintenance procedures to ensure on-going compliance.

The proposed amendments require that an annual source test be conducted on each vapor processing unit at bulk terminals in accordance with the District's Source Test Method 34 (ST-34), CARB test procedures, or U.S. Environmental Protection Agency's (EPA) Reference Method 25. Similarly, the District is proposing a biennial source test at bulk plants.

In addition, the proposed amendments require gasoline bulk terminals to monitor their vapor processing units' performance. This monitoring can be performed by installing a hydrocarbon analyzer on the exhaust stream to monitor organic compound concentrations, or by alternative parametric monitoring of the vapor processing units. This monitoring is proposed to ensure performance is sustained at the high efficiency required to meet the VOC standards. The advantage of monitoring the hydrocarbon levels at the outlet of the abatement device is that it is a direct measurement of emissions, and can provide early warning if any aspect of the abatement system begins to malfunction. Hydrocarbon concentration measurement, however, does not replace a source test as the official determination of compliance. It is a tool to help a facility hold itself accountable for the abatement efficiency of its vapor processing system, avoid the risk of exceeding the District's emissions standard, and keep hydrocarbon emissions sustained at the desired low levels. While facilities will be required to comply with the Rule's parametric variable monitoring and notification provisions, facilities will not be in violation of District rules if they exceed their parametric variable limit if appropriate corrective actions are taken. When the District is notified by a facility that it is has exceeded its parametric variable limit, the District may conduct a source test at the facility to ensure that the facility is in compliance with the District's emissions standard. The total annualized cost for installing a parametric monitor, span gas, automatic calibration equipment, and utilities is estimated at approximately $18,000 per terminal.

The proposed amendments also provide an option to develop an alternate parametric monitoring approach that would meet the requirements of 40 CFR, Part 63, Subpart R or 40 CFR, Part 63, Subpart BBBBBB. Alternate parametric monitoring protocols will most likely cost less, but may require more intensive operational effort depending on the process control and management information systems available at the bulk terminal.

B. Reduction of Vapor and Liquid Leak Standards

The leakage standards for cargo tanks are set by CARB, in its CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks.* Cargo tanks are required to be "vapor tight" and meet liquid leak requirements. These standards have been incorporated into Regs. 8-33 and 8-39 by reference. In summary, these standards measure the pressure decay of a cargo tank pressurized to 18 inches of water pressure, and also require that cargo tank equipment meet both vapor and liquid leak standards. If the cargo tank is "vapor tight," the pressure will not decay significantly, and the cargo tank will have no measurable leaks. CARB certifies cargo tanks to be vapor tight. Regs. 8-33 and 8-39 require use of CARB certified cargo tanks.

Liquid and vapor leak requirements at bulk terminals and bulk plants are set by two District regulations. Regulation 8, Rule 18, *Equipment Leaks* applies to the typical pumps, piping and process vessels found at bulk terminals and bulk plants and establishes a vapor leak standard of 100 – 500 ppm, depending on the type of equipment and a liquid leak standard of 3 drops per minute. Regs. 8-33 and 8-39 set specific leak standards for the unique equipment found at bulk terminals and bulk plants. This unique equipment includes the pressure/vacuum (P/V) valves that serve as safety pressure devices for vapor recovery systems; the connectors (couplings) used on the hoses from the bulk terminal or bulk plant loading line to the cargo tanks; and the vapor recovery hoses from the cargo tanks back to the vapor recovery system at the terminal, or back to the tank using the vapor balance process at the bulk plant.

Currently, the vapor leak standard in Regs. 8-33 and 8-39 for P/V valves is consistent with the standard described in CARB CP-202, *Certification Procedure for Vapor Recovery Systems of Bulk Plants* and CARB CP-203, *Certification Procedure for Vapor Recovery Systems of Bulk Terminals.* Pursuant to the procedures outlined in CARB TP-202.1, *Determination of Emission Factor of Vapor Recovery Systems of Terminals* and CARB TP-203.1, *Determination of Emission Factor of Vapor Recovery Systems of Terminals*, any leaks from the pressure side of the P/V valve are captured by enclosing the P/V valve discharge with a plastic bag, and measuring the leak rate. However, the vacuum side of the P/V valve cannot be enclosed with a plastic bag without compromising the safety of the vacuum break device. Therefore, any leakage from the vacuum side of the P/V valve is measured with a hydrocarbon analyzer. CARB currently defines "vapor tight" as leakage less than 100% of Lower Explosive Limit (LEL) hydrocarbon concentration. 100% of LEL equates to 51,000 ppm (as methane in air) when measured at the inlet to the vacuum side of the P/V valve.

Currently, the District's vapor leak standard in Regs. 8-33 and 8-39 for connectors is also consistent with the standard described in CARB CP-202, *Certification Procedure for Vapor Recovery Systems of Bulk Plants* and CARB CP-203, *Certification Procedure for Vapor Recovery Systems of Bulk Terminals.* Pursuant to CARB TP-204.3, *Determination of Leaks*, leakage is measured with a hydrocarbon analyzer. The

standard is 100% of LEL, when measured 1 inch from the cargo tank half of the connector, and when at the interface of the potential leak from the bulk terminal or bulk plant half of the connector. Currently, Regs. 8-33 and 8-39 are consistent with these leak standards.

EPA has also independently set standards for vapor leaks. EPA had established the vapor leak standard at 10,000 ppm (as methane) for new gasoline bulk terminals (40 CFR 60 Subpart XX), and at 500 ppm (as methane) for gasoline bulk terminals subject to EPA's Maximum Achievable Control Technology (MACT) standards (40 CFR 63 Subpart R). Other air districts have updated their vapor leak limits to 10,000 ppm to reflect EPA's standards of performance. EPA's most recent (January 2008) requirements set in 40 CFR 63 Subpart BBBBBB establish the vapor leak standard at 500 ppm. Many, if not all of the bulk terminals and plants in the District are subject to EPA's vapor leak standard during source tests, which the District may incorporate and enforce through facility permit conditions. Staff received guidance from CARB that the District has the authority to set more stringent vapor leak standards at terminals and bulk plants in the Bay Area. The proposed amendments reduce the vapor leak limit for loading hose connectors, vapor recovery hose connectors, and pressure/vacuum valve leaks to 3000 ppm (as methane), which is equal to 6% of Lower Explosive Limit. This limit is consistent with the most stringent limits currently in place in the state. Source test experience and inspection experience find that terminals and bulk plants are currently capable of meeting this more restrictive vapor leak limit provided proper maintenance procedures are in place. The amendments propose an effective date of July 1, 2009 for this lower vapor leak limit. The vapor leak standards for the cargo tank connectors to both the liquid loading arm and vapor recovery line will continue to be 100% of LEL.

In addition to imposing vapor leak standards, CARB, and Regs. 8-33 and 8-39 require that all equipment associated with gasoline cargo tank delivery and loading operations be free of liquid leaks. Currently, liquid "leak free" equipment is defined in Regs. 8-33 and 8-39 as equipment that leaks less than four drops of liquid gasoline per minute, not including leaks that occur during transfer fitting and loading arm disconnects. The proposed amendments will make these rules consistent with CARB's liquid leak standard. The CARB liquid leak standard is no more than three drops per minute. With the advent of improved self-sealing valves at the end of cargo and vapor recovery hoses based upon field observations of loading practices, the proposed standard is being achieved today, provided good maintenance practices are employed.

CARB, and Regs. 8-33 and 8-39 also have a liquid leak standard for liquid leaks that may occur when the liquid fill hose connectors or the vapor recovery hose connectors are disconnected from each other. All three rules stipulate that no more than 10 milliliters of product may be released per disconnect, averaged over three consecutive disconnects. Staff proposes to retain the existing standard for disconnect leaks.

The proposed amendments also require that terminal owners inspect loading arm connectors and vapor recovery hose connectors for vapor and liquid leaks daily using sight, sound and smell; and inspect them for leaks with a hydrocarbon analyzer weekly. All inspection records must be kept on file for review by District inspectors.

If facility personnel discover a leak, a repair period of 8 hours for connectors (or 72 hours for P/V valves) is proposed to provide reasonable time to repair, or remove from service, the affected portion of the loading arm or vapor recovery system until the cause of the leak has been determined, repairs have been completed, and the equipment has been re-inspected immediately on its return to service to confirm it is leak free.

The amendments described above are being proposed to make District standards consistent with current capabilities of equipment at gasoline bulk terminals, and consistent with the most stringent standards already in place in the state. Existing P/V valves and connectors at terminals and plants have been observed to meet the proposed leak standards. The District does not anticipate that gasoline bulk terminals and plants will require any new equipment or retrofits, so will not incur additional capital costs to comply with the proposed lower liquid leak standard. Additional maintenance may be required.

Costs to accommodate the lower vapor and liquid leak limits are very minor. Connectors typically do not leak until they are damaged in some way. Pressure/vacuum valves typically do not leak until they open from overpressure, or are damaged. Lower leak limits may cause maintenance to be necessary one week earlier than currently necessary. Estimated costs are $40 per connector or valve annually, totaling an estimated $1000 for a terminal, or $100 for a bulk plant.

C. Compatibility of All Product Loading and Vapor Recovery Connections

The proposed amendments explicitly prohibit loading gasoline into a gasoline cargo tank unless the cargo tank's piping connectors are compatible with the gasoline bulk terminals' and plants' loading arms and vapor recovery connectors, and meet the vapor and liquid leak requirements. Incompatible piping connectors allow excessive liquid and vapor leaks. Because most cargo tank carriers load gasoline at more than one petroleum terminal or bulk plant, the proposed standard requires each bulk terminal and bulk plant to inform the cargo tank owner/operators of the compatible loading arm connectors and vapor recovery hose connectors required. In addition, the terminal and bulk plant operators must require the continued use of compatible connectors for cargo tanks to be allowed access to the terminal or bulk plant. Similarly, CARB already requires that the connectors of the cargo tank be compatible with the fittings on the fill pipes at the service stations and gasoline terminals or bulk plants that the cargo tank service.

Based on District staff experience at terminals and plants, terminal or plant operators adjust the counter-weight system in their facilities' loading arms as needed so that the

height of their loading arms meet connectors situated on high profile cargo tanks. Terminals or plants may also have available adapters that fit a variety of loading connectors as a precaution.

Improved connections between loading arms, vapor recovery hoses and cargo tanks can reduce organic emissions. However, such emission reductions are difficult to quantify accurately since the District does not have sufficient data to determine the frequency of cargo tank loadings using incompatible equipment. The total annualized cost to adjust a facility's counterweight system and to carry a variety of adapters over a ten-year period is estimated to be $200 per loading rack. This estimate takes into account an additional adjustment of the counterweight system once a year. Reduced emissions are estimated at 100 lbs of VOC for each terminal, totaling 0.5 tons per year.

D. Installation of Pressure Monitors on Vapor Lines

The proposed amendments will assure that gasoline bulk terminals and bulk plants maintain proper pressures in the vapor recovery system piping at the loading racks. The proposed amendments require that gasoline bulk terminals and bulk plants install pressure monitoring systems on all loading racks. As described above, a cargo tank operator loads the cargo tank from the bottom. As the product fills the cargo tank, residual or collected vapors in the cargo tank enter the vapor recovery hose and piping and ultimately these vapors are processed through the vapor processing unit (VPU). EPA, CARB, and the current rules 8-33 and 8-39 all require the pressure in vapor recovery systems to not exceed a set pressure of 18 inches of water column, as measured at the vapor cargo hose/cargo tank interface. When 18 inches of water pressure is exceeded at the vapor cargo hose/cargo tank interface, the pressure/vacuum (P/V) valve located on the dome hatch on top of the cargo tank is typically experiencing pressures above 20 inches of water column. At these pressures, a P/V valve on the cargo tank may open and release all or part of the vapors contained in the headspace of the cargo tank to the atmosphere.

Pressure monitors and/or alarms will provide early warning if the backpressure on the vapor recovery system increases. Occasionally, the vapor collection system piping will have a restriction or blockage, which causes a build-up of pressure in the cargo tank headspace. When a restriction or blockage does occur, subsequent cargo tanks loading at the same rack can experience the same backpressure problem until the problem is corrected. That pressure build-up can release vapors to the atmosphere, as well as cause a potentially flammable situation. Backpressure monitoring and/or alarms allow the operator sufficient time to prevent releases, as well as prevent a potentially hazardous situation.

Backpressure monitors can be installed in terminal piping as part of the vapor recovery system so they are visible to the cargo tank drivers and operators during loading events. The monitors will detect and signal when excessive pressure has developed in cargo tanks. A correlation must be established between the pressure at the monitoring point

and the pressure at the vapor hose / cargo tank interface by testing near maximum design load rate conditions. The District will work with industry to ensure the test near maximum design load conditions do not exceed the 18" water pressure limit. The District estimates that up to 40 – 50 lbs of gasoline vapors per cargo tank may be released if a cargo tank's P/V valve set pressure is exceeded during loading at a terminal.

The proposal requires that bulk terminals install either an alarm system or an automatic shutoff system on their loading racks to notify operators if the vapor recovery piping back pressure is being exceeded during loading operations. An automatic shutoff system would stop a gasoline loading operation as soon as the back pressure in the vapor return hose exceeds 18 inches.

As an alternate, an alarm system would notify the operator as soon as the backpressure in the vapor hose exceeds 16 inches of water. If the backpressure in the vapor hose continues to increase to 18 inches of water, the alarm would again sound, and the operator would be required to complete the load, and then shut down that loading arm and the affected portion of vapor return system until the operator determines the cause of the pressure exceedance and completes repairs. In addition, operators will be required to notify the APCO within 24 hours, and document the time, date, pressure alarm status, responses, results of the investigations, and corrective actions taken each time the pressure exceeds 18 inches water column.

The proposed amendments include requirements to shutdown the affected portions of the vapor recovery system if excessive pressure in the vapor recovery system occurs. The proposed amendments include specific language that allows the facility to finish loading the delivery vehicle (all cargo tanks and individual compartments), because shutting down part-way through a load can create additive addition problems that can cause the finished product to be off-test.

The total annualized cost to install and maintain a single backpressure monitor on a loading rack over a ten-year period is approximately $2,700 per loading rack. The total annualized cost to install and maintain an automatic shutoff system on each loading rack over a ten-year period is estimated to be $8,100 per loading rack. If a bulk terminal installs an alarm system, the total annualized cost on each loading rack is estimated to be $3,400 over a ten-year period. Currently, all bulk terminals have manual shut-offs installed on each of their loading racks.

Bulk plants do not need to install an automatic shut-off or alarm system for their vapor recovery systems. Instead, the amendments propose to require the installation of a pressure gauge. The pressure gauge would be mounted on the end of the fixed piping of the vapor riser closest to the vapor hose connector. The gauge would indicate pressure levels in the hose. The cargo tank operator must maintain the vapor recovery system pressure below the CARB-certified set pressure of the P/V valve(s) and the

pressure gauge will allow him to readily discern this. If the set pressure is exceeded, the cargo tank operator must immediately cease the loading operation. The District estimates that up to 40 - 50 lbs of gasoline vapors per cargo tank may be released from a single open P/V valve on a cargo tank loaded to capacity at a bulk plant. The total annualized cost to install and maintain a pressure gauge over a ten-year period is estimated to be approximately $700.

E. Block Valves or Vapor Check Valves in Vapor Recovery Piping Systems

The District proposes a new requirement to install a block valve or a vapor check valve at the end of the vapor recovery piping at each loading rack location. These valves should be located as close as is practical to the vapor recovery hose.

When vapor recovery hose or vapor recovery connectors require maintenance, the current practice is to take that loading rack out of service, and isolate the vapor recovery hose and connector for maintenance. However, in many instances, there may be only one block valve or vapor check valve in the vapor recovery system piping, located at the far end of the loading rack. When the vapor recovery hose or connector is opened for repair, the gasoline vapors in the hose and any associated piping up to the vapor check valve are released to the air. Installation of an additional block valve or vapor check valve at the end of each vapor recovery system piping near the vapor recovery hose will minimize the gasoline vapor that is emitted during this maintenance activity. Block valves can be installed for an annualized cost of about $200.

F. Hang the Vapor Recovery Hose When Not In Use

A new requirement is proposed to provide a hanger for each vapor recovery hose. When the vapor recovery hose is not in use, it should be hung up and out of the truck driveway, so that the connector does not get driven over and damaged. Connectors that have been damaged by trucks have been a source of excess emissions, and extra maintenance is required to replace the damaged connectors. Reduction in emissions from this simple approach is difficult to quantify, but is estimated at 0.05 tons per year at each terminal, totaling 0.5 tons per year. A hanger for each vapor hose can be installed for an annualized cost of about $100.

G. Monitor Hydrocarbon In The Airspace Of Vapor Storage Tanks

Four of the gasoline bulk terminals in the Bay Area have vapor recovery systems that include vapor storage tanks for temporary storage of vapors produced during gasoline loading operations. The storage tanks are cylindrical steel shells that contain a flexible diaphragm or bladder, which expands upwards as vapors enter. To handle large surges in recovered vapors from busy loading periods, vapors are temporarily stored in these tanks until they can be processed when loading decreases. Storage tanks also have the added benefit of allowing the VPU to maintain a steady state operation.

The flexible diaphragm inside the vapor storage tank can develop leaks and degrade to an extent that gasoline vapors may be leaked into airspace above the diaphragm, and ultimately into the atmosphere. A diaphragm typically lasts from seven to 11 years. Currently, organic compound emissions in/from the airspace above the diaphragm are limited to a concentration of 3,000 parts per million (ppm) expressed as methane or 6.8 kilograms (15 pounds) per day. The amendments propose to retain the allowable concentration standard of 3,000 ppm (expressed as methane).

The proposed amendments require weekly monitoring of the vapor storage tank airspace when the vapor storage tank is in service and gasoline loading is in progress. A portable hydrocarbon analyzer can be used to monitor the hydrocarbon concentration and verify that total organic compound concentrations in the airspace remain below 3,000 ppm. 3,000 ppm equates to 6% of LEL for facility hydrocarbon detectors that measure in LEL. Weekly monitoring will allow the operator to detect any degradation or cracks developing in the diaphragms, so the vapor storage tank may be taken out of service for repair immediately, preventing excessive hydrocarbon leakage over an extended period of time. This proposed amendment only affects gasoline bulk terminals that operate vapor storage tanks as part of their vapor recovery systems. Most facilities already own hydrocarbon analyzers. Cost of a new portable hydrocarbon analyzer is $100 – 200 annually, depending on the analyzer chosen.

H. Install Sample Lines on Pressure / Vacuum Valves

District staff tests P/V valves located on top of the vapor recovery systems and vapor storage tanks to confirm that the valves comply with the vapor tight standard. Currently, staff must climb as much as 20 feet above grade to reach the top of the vapor recovery systems and vapor storage tanks to conduct these tests. The proposed amendment requires owners and operators of gasoline bulk terminals to install permanent sampling lines to their P/V valves with an outlet near ground level to provide a more accessible sampling location and enable District and facility staff to conduct the sampling safely and more frequently.

Sampling lines to inaccessible P/V valves would need to be at least 0.25 inch inside diameter and situated one (1.0) centimeter from the pressure outlet and vacuum inlet of the P/V valve. It is most effective to install these sample lines on the downwind side of the pressure and vacuum ports of the P/V valve. The sampling line will then be brought down to less than five (5) feet above grade and equipped with a valve. A portable hydrocarbon analyzer can then be used at the end of the valve to determine compliance with the leak concentration standards in the rules.

A majority of terminals have already installed sampling lines at most locations where their P/V valves are inaccessible. This amendment will ensure conformity in the installation of the sampling lines. The District estimates that the total annualized cost of installing sample lines over a ten-year period is about $200. Emission reductions from this requirement are based on catching P/V valve leaks earlier, so they can be repaired

more quickly. VOC emission reductions from better P/V valve monitoring are estimated to total 0.5 tons per year for the terminals and bulk plants in the Bay Area.

I. Minimize Release of Vapors During Maintenance and Repairs

The amendments propose to enhance the practices used to remove gasoline liquid and vapors from piping systems and cargo hoses in preparation for maintenance and repair work in order to reduce potential fugitive gasoline vapor emissions. Some terminal operators pour excess gasoline from their loading arms and cargo hoses into their oily water drainage system when they have to drain the hoses and connectors for routine maintenance. Staff estimates that 17 – 22 gallons of gasoline are spilled from a loading arm onto the ground and into drain basins prior to washing the gasoline into the terminal's underground slop tanks. One third may evaporate prior to washing the remainder into the oil – water separator. The resultant emissions would be more than 30 lbs. This amendment would prohibit this practice and require that bulk terminal and bulk plant operators dispose of gasoline into an enclosed system that is connected to the vapor recovery system prior to maintenance or operational procedures that require draining the liquid or vapor hoses. This may be a portable maintenance container that is equipped with a liquid and vapor recovery hose connectors, or a slop tank.

The proposed amendments specifically prohibit the draining or storage of gasoline into an open container or the handling of gasoline in any manner (e.g., spillage, purging) that would allow liquid gasoline or gasoline vapors to enter the atmosphere or to flow to a sewer or to contaminate the ground. Any residual liquid found in hoses due to condensation of the vapors must be disposed of either in a portable maintenance container or in a slop tank to the greatest extent practicable (not all liquid and vapor can be recovered using these methods, but each facility is expected to recover as much liquid and vapor as possible, and only drain liquid into an open container for disposal when no other reasonable method is available). Finally, like other industrial equipment, the portable maintenance containers or slop tanks must have vapor tight covers, seals, and/or lids that meet the leak requirements of Regulation 8, Rule 18. The hose connectors and any adapters must meet the vapor and liquid leak standards.

The annual emissions reductions from this proposal are difficult to quantify because the number of spills at bulk terminals is not documented. If, as described above, five gallons of gasoline evaporated during quarterly maintenance at each loading rack, organic compound emissions would total 500 lbs per year or more at each terminal, depending on its size. The total annualized cost over a 10-year period for developing and operating a handcart with a portable liquid transfer tank is approximately $900. This estimate includes the cost of a portable tank, two hose connectors, one drain line, and labor.

J. Emissions Monitoring, Inspection, Notification, and Reporting Protocol

EPA's most recent (January 2008) requirements for bulk terminals and bulk plants are set forth in 40 CFR Part 63, Subpart BBBBBB. These requirements apply to all

gasoline bulk terminals and bulk plants that are not subject to EPA's Maximum Achievable Control Technology (MACT) requirements set forth in 40 CFR Part 63, Subpart R. Among many other requirements, Subpart BBBBBB requires a monthly leak inspection of all equipment in gasoline service using sight, sound and smell detection methods. The proposed amendments include a requirement for an APCO approved monitoring, inspection, notification and reporting plan that will be helpful for both industry and District staff by requiring approval and implementation of practices that will satisfy the requirements of Subpart BBBBBB's monthly leak inspection and other requirements in Subparts BBBBBB, XX and R and 8-33, as applicable, while providing flexibility for industry to develop terminal-specific plans.

K. Require Updated CARB Certification

Pursuant to California Health and Safety Code Section 41954, owners and operators of California gasoline bulk terminals and plants must have their vapor recovery systems certified by CARB. The District currently requires that all bulk terminals' and bulk plants' vapor recovery systems comply with CARB standards and certification procedures at all times. These amendments propose to clarify when the District expects facilities to apply for recertification with CARB. The purpose of this requirement is to ensure that gasoline bulk terminal and plant owners and operators have their existing facilities recertified by CARB following any substantive modifications that cause an increase in throughput or capacity, or following installation of new equipment.

Owners and operators are required to notify CARB of any substantive modifications or additions to their terminal or plant under Title 17 of the California Code of Regulations. The recertification procedure ensures that any changes performed on the terminal or plants adhere to the existing regulations. A maximum throughput for terminals and plants is also established as part of the certification process based on the ability of existing control equipment to control vapor emissions generated. Re-certification of the plant or terminal is not required during routine maintenance that does not alter the throughput, modify the performance of the loading arm, or alter the original design of the terminal or plant. This is existing State law, although the amendment will clarify when the District expects facilities to apply for recertification and make it easier for District staff to enforce the provisions requiring valid certifications for individual terminals and plants. Consequently, this amendment has no anticipated emission reductions and does not require any additional capital expenditures by bulk terminals or plants.

L. Minor Editorial Changes

The definitions in Regulation 8-33 and Regulation 8-39 are proposed to be expanded or edited for clarification. Definitions for gasoline cargo tank, loading event, portable maintenance container, Reid vapor pressure, slop tank, vapor processing unit and vapor recovery system have also been added.

The District is proposing to amend the definition of gasoline to include aviation gasoline and additives that are delivered to a bulk terminal or plant via cargo tanks. Aviation

fuels are currently not required to be distributed using a CARB certified vapor recovery system or cargo tank, however are required to comply with all the other standards (leak standards, etc.). The proposed amendments clarify the standards for aviation gasoline and additives.

IV. Emissions and Emission Reductions

District staff has estimated organic compound emissions attributable to cargo tank loading and vapor recovery operations at gasoline bulk terminals and bulk plants. District staff obtained annual throughput data for each fuel product dispensed from each of the Bay Area bulk terminals and bulk plants and obtained the temperatures and vapor pressures for each type of fuel that is received at the terminal or plant when the information was available. District staff used this data and District source tests to estimate the organic compounds emissions from cargo tank loading and vapor recovery operations.

Vapor Recovery Systems: Although a VPU is highly efficient, some small percentage of vapors remains unprocessed and is emitted from the outlet. Fugitive emissions from vapor recovery system flanges, fittings, and valves also release organic compounds. However, because these emissions are unpredictable and sporadic, emissions from these fugitive sources were not quantified. Regulation 8-33 currently specifies that no more than 0.08 lbs of organic compounds per 1,000 gallons of any petroleum product loaded may be released from a CARB-certified vapor recovery system at a bulk terminal, and Regulation 8-39 currently specifies that no more than 0.5 lbs of organic compounds per 1,000 gallons loaded may be released from a CARB-certified Phase I recovery system at a bulk plant. The District has set permit conditions for new or modified vapor recovery systems at bulk plants and terminals that are more stringent than the rule standards based on Best Available Control Technology. In estimating emissions from vapor recovery systems, terminal or plant specific permit limits were multiplied by the facility throughput. The total organic compound emissions from the VPU outlets are currently estimated at 0.21 tpd for bulk terminals and 0.006 tpd for bulk plants.

Gasoline Cargo Tank Operations: Cargo tank loading operations may release organic compounds through minor losses during loading operations and from potential spilled product while disconnecting the transfer fittings after loading or unloading. These vapors are the result of the “allowable” leak rates in CARB’s CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks*. To estimate emissions from cargo tank loading, the District’s Source Test Section has developed an equation to approximate the total mass of evaporative emissions being released from a cargo tank during loading. Using typical loading conditions, District staff estimates organic compound emissions from cargo tanks to be 0.30 tpd from terminals and 0.001 tpd from bulk plants.

A third source of emissions occurs when vapors enter the atmosphere from spills that occur when bulk terminal or plant loading arm fittings are disconnected from cargo tanks during pre-fill and post-fill situations. Fitting losses are associated with operator error or incompatible connection closures. Both Rules 8-33 and 8-39 currently restrict the amount of disconnect losses to no more than 10 milliliters per disconnect, averaged over three disconnects. District inspection and source test data from the past five years were used to estimate spillage losses. Assuming that 100 percent of the spillage evaporates, emissions were estimated based on assuming that the maximum allowable spill (10 milliliters) occurs in 10% of the loading events while the remaining loading events do not spill any gasoline. Average organic compound emissions from spillage losses are estimated at 0.004 tpd for terminals and 0.00002 tpd for plants.

Additional emissions occur when equipment malfunctions or human error causes the cargo tank, connectors, vapor recovery system or loading controls to fail to operate as designed. These events occur randomly, and each can lead to significant VOC emissions. Estimates of historical emissions from these events are not included in the inventory because they are truly random in when and how often they occur, and the extent of resulting emissions can vary widely. However, since these episodic events can be significant, much of the proposed monitoring requirements target reducing or eliminating the frequency, duration, or size of these events.

Table 1 presents a summary of the emission estimates for all bulk terminals and bulk plants in operation in the Bay Area. These emissions do not include fugitive emissions as mentioned above, or emissions from storage tanks at the terminals and plants. As mentioned above, the estimates also do not include estimated emissions from bulk terminal and bulk plant episodic events.

Table 1
Emissions from Terminals and Plants

Facility	Emissions from VPU (tpd)	Evaporative Emissions from Cargo Tanks (tpd)	Loading Losses from Cargo Tank Spillage (tpd)	Total Organic Emissions (tpd)
Gasoline Bulk Terminals	0.214	0.300	0.004	0.518
Gasoline Bulk Plants	0.0064	0.0011	0.00002	0.0075

Emission Reductions:
Table 2 summarizes the emission reductions from the proposed amendments, including both daily and conservative estimates of the impact of fewer episodic events.

Table 2
Emissions Reductions from Proposed Amendments

Proposed Amendment	Estimated Emission Reductions: Daily	Estimated Emission Reductions: Episodic
Emission limits	0.06 tons per day	
Vapor and Liquid leak standards	0.01 tons per day	
Compatibility of connectors		uncertain
Pressure monitors on vapor lines		0.021 tons per event (terminal) 0.018 tons per event (plant)
Block valves or Vapor check valves		0.01 tons per event
Hang Vapor hoses		0.5 tons per year
Monitor hydrocarbons in vapor storage tanks		0.004 tons per day (for 4 terminals)
Sample lines on P/V valves		0.5 tons per year
Spilled gasoline during repairs		0.015 tons per event
TOTAL	**0.07 tons per day***	**1.0 tons per year ~0.02 tons per event***

* Episodic emissions (events) and daily emissions are not combined.

V. ECONOMIC IMPACTS

A. Compliance Costs

Costs to comply with the various specific proposed amendments are included in the discussion of the proposed amendments (above). Cumulatively, the cost for an individual terminal can total as high as $200,000 capital, amortized to an impact on operating costs of approximately $65,000 annually. However, most terminals already have some of the monitoring equipment installed as part of their permit requirements, so the typical terminal will require approximately $100,000 capital, amortized to an impact on annual operating costs of approximately $35,000.

B. Incremental Cost Effectiveness

Reduction in the emission limit for bulk terminals will not require any new or replacement equipment, because the bulk terminals currently achieve the lower standard. It will require enhanced monitoring, and possibly more maintenance. The parametric hydrocarbon monitoring proposed can cost $100K capital, and is estimated to cost $18,000 annually. Emission reductions from this enhanced monitoring are estimated to total 0.010 tons per day. Cost effectiveness for this monitoring is approximately $5,000 per ton. Alternate parametric monitoring will typically cost less, but may require more operational effort depending on the existing management and operational information systems in place.

More restrictive vapor leak limits will cause leaks to be identified and repaired more quickly. Staff assumed that half the connectors and pressure/vacuum valves would require repair one week earlier than otherwise needed. Repair costs are estimated at $2000, and are incurred one week earlier than otherwise needed. Annualized costs increase approximately $40, so cost effectiveness of this proposed amendment is estimated to be $800 per ton of VOC reduced.

Loading arm and vapor recovery connection improvement costs are estimated to total approximately $600 annually. These include adjustments in the counter-weight system that eases manipulation of the liquid loading arm, and a hanger to keep the vapor hose up and out of the driveway so it does not get damaged by a truck. These improvements are estimated to have an impact of 200 lbs of VOC reductions per year at each terminal rack. Cost effectiveness for these improvements is approximately $6000 per ton of reduced emissions.

Pressure monitors are estimated to cost $15,000 per loading rack, or as much as $150,000 for a large terminal. The amortized capital, and increased maintenance and operational costs are estimated to be approximately $2,700 per year. The addition of an alarm system is estimated to increase the cost to $20,000 per loading rack. Amortized capital and maintenance expenses are expected to be approximately $3,400 per year. An automatic shutdown system could cost as much as $200,000 capital, but terminal operators have the option to choose the less costly alarm system option.

Enhanced back pressure monitoring is expected to prevent at least one over-pressure events each quarter at each loading rack. These 4 events are estimated to release a minimum of 50 lbs. of VOC each, totaling a reduction of at least 200 lbs. VOC annually at each rack. In addition, early warning of high pressure events will reduce the number of these events, and reduce the existing allowable leakage from cargo tanks when there is high backpressure. Cost effectiveness for a backpressure alarm system is approximately $25,000 per ton.

Block valves or vapor check valves on each vapor recovery piping system cost approximately $1000 to install on each loading rack, amortized to about $200 annual cost. The VOC release prevented by these valves is approximately 20 lbs. of hydrocarbon each quarter at each loading rack. Cost effectiveness for these valves is about $4000 per ton of reduced VOC.

Monitoring the vapor storage tank for leakage will not require any capital construction, but may require an additional portable hydrocarbon monitor. Annual costs are estimated at $100 – 200, based on the hydrocarbon monitor selected. When the vapor storage tank diaphragm leaks, it can become a significant release. However, they only leak approximately every 7 – 11 years. Weekly monitoring will reduce the emissions from a leak by identifying it in the early phases, rather than allowing it to leak for weeks or months. VOC reduction was estimated at 200 lbs. of hydrocarbon per year at each of the four terminals with vapor storage tanks. Cost effectiveness of monitoring the vapor storage tank emissions is estimated at $20,000 per ton.

Installation of sample lines to the ports of pressure/vacuum valves is estimated to cost $300 per valve, or $1500 for a typical terminal with five P/V valves. Annual cost is estimated to be approximately $200. Emissions from P/V valves are estimated to be reduced in half, approximately 100 lbs. per year at each facility. Cost effectiveness of these sample lines is $4000 per ton of VOC's.

The capital cost of fitting an existing slop tank or using a portable maintenance container to control the VOC emissions when taking a loading hose or vapor recovery hose out of service is estimated at $6000. Amortized annual costs are $900. Emission reductions are estimated at 30 lbs of hydrocarbon, eight times each year at each terminal. Cost effectiveness of using a container to control VOC's is approximately $7500 per ton of VOC's.

The seven bulk terminals that must already meet 0.04 lbs./1000 gal. will require very little new equipment. The other five bulk terminals will probably require installation of hydrocarbon monitoring and backpressure monitors. The average terminal in the Bay Area will have to improve their preventive maintenance to assure all facilities are leak free and vapor tight. Cumulative cost effectiveness for all the improvements required is estimated to be $13,200 per ton of VOC reduction.

C. 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 has prepared a socioeconomic analysis of the proposed amendments to Regulation 8, Rules 33 and 39. The analysis concludes that the affected facilities are not significantly impacted by costs stemming from the proposed amendments. Costs are analyzed to be 0.22% to 0.31% of net profits for terminals, and 2.03% for bulk plants, well under the 10% threshold used for determining when costs are significant. No impact is expected on small business, or on jobs.

VI. Environmental Impacts

A. CEQA

Pursuant to the California Environmental Quality Act, the District has had an initial study for the proposed amendments prepared by Environmental Audit, Inc. of Placentia, California. The initial study concludes that there are no potential significant adverse environmental impacts associated with the proposed amendments. A negative declaration is proposed for approval by the District Board of Directors. The negative declaration and initial study was made available to the public for comment, and no comments were received.

B. Greenhouse Gas Emissions

In June, 2005, the District's Board of Directors adopted a resolution recognizing the link between global climate change and localized air pollution impacts. Climate change, or global warming, is the process whereby emissions of anthropogenic pollutants, together with other naturally-occurring gases, absorb infrared radiation in the atmosphere, leading to increases in the overall average global temperature.

While carbon dioxide (CO2) is the largest contributor to global warming, methane, halogenated carbon compounds, nitrous oxide, and other species also contribute to climate change. Gases in the atmosphere can contribute to the greenhouse effect both directly and indirectly. Direct effects occur when the gas itself is a greenhouse gas (GHG). While there is relative agreement on how to account for these direct effects of GHG emissions, accounting for indirect effects is more problematic. Indirect effects occur when chemical transformations of the original compound produce other GHGs, when a gas influences the atmospheric lifetimes of methane, and/or when a gas affects atmospheric processes that alter the radiative balance of the earth (e.g., affect cloud formation).

VOCs have some direct global warming effects; however they may also be considered greenhouse gases due to their indirect effects. VOCs react chemically in the

atmosphere to increase concentrations of ozone and may prolong the life of methane. The magnitude of the indirect effect of VOCs is poorly quantified and depends on local air quality. Global warming not only exacerbates ozone formation, but ozone formation exacerbates global warming. Consequently, reducing VOCs to make progress towards meeting California air quality standards for ozone will help reduce global warming.

Proposed amendments to Regulation 8, Rule 33 and 39 will have very little impact on the terminal's vapor recovery systems or overall efficiency, so no significant net change in greenhouse gas emissions is anticipated. Carbon adsorption units found in 10 of the bulk terminals have the advantage of recycling gasoline vapors back to a refinery. Thermal oxidizers are found in two of the gasoline bulk terminals where it is not practical to recycle vapors back to a refinery. These thermal oxidizers do have a slight advantage in that they burn methane, a minor component in gasoline vapors. Carbon adsorption does not capture methane very effectively. Although methane has a greater global warming potential than carbon dioxide (21X), overall, carbon adsorption units generate less green house gas emissions than thermal oxidizers.

Proposed amendments to Regulation 8, Rule 33 and Rule 39 have very little impact on efficiency or energy conservation. Bulk terminals and plants that are equipped to recycle gasoline vapors are currently doing so. Those who are currently burning these vapors will also continue to do so. As explained in more detail in the initial study and negative declaration, the proposed amendments will have little impact on greenhouse gas emissions because they will not require increased use of existing thermal oxidizers or new thermal oxidizers, which generate greenhouse gas emissions from combustion of VOC.

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.

Gasoline cargo tanks are regulated by CARB and CARB certifies bulk terminals and plants to District emissions standards using CARB test methods. Table 3 compares federal requirements for new sources, hazardous pollutants, and generally achievable control technology (GACT). CARB requirements are referenced in the proposed amendments to ensure consistency between CARB and District requirements. New federal requirements for inspection, monitoring, notification and reporting have been incorporated into the proposed amendments to ensure consistency between federal and District requirements.

Table 3
Comparison of Federal and District Requirements
Gasoline Bulk Terminals and Bulk Plants

Requirement	Applicability	Vapor Leak Standard	Emission Standard	Loading	Monitoring
40CFR60 XX NSPS	New bulk terminals with throughput greater than 75,700 liters per day (20,000 gal/day)	10,000 ppm	New vapor collection system: 35 mg/l TOC Existing vapor processing system: 80 mg/l TOC	Submerged fill. Collect TOC vapors Prevent TOCs collected at one rack passing to another rack. Facilities – vapor tight. Cargo Tanks – vapor tight. Track cargo tanks to ensure vapor tightness. Compatible connections required. Pressure less than 450 mm water.	Monthly leak inspection incorporating sight, sound and smell. Document leaks with log book. Initial repair leaks within 5 days. Repair within 15 days.
40CFR63 R (MACT)	Terminals greater than 75,700 liters per day, and not a major (Title V) source.	500 ppm	10 mg/l gasoline loaded Equivalent to 0.0833 lbs/Kgal	Submerged fill. Collect TOC vapors Facilities – vapor tight. Cargo Tanks – vapor tight. Track cargo tanks to ensure vapor tightness. Pressure less than 450 mm water.	Monthly leak inspection incorporating sight, sound and smell. Document leaks with log book. Initial repair leaks within 5 days. Repair within 15 days. Continuous monitoring of organic emissions, or parametric monitoring of VPU.
40CFR63 BBBBBB (GACT)	Terminals and plants with throughput > 250,000 gal/day AND not subject to Subpart R	500 ppm	TOC limit: 80 mg/l gasoline loaded	Prevent TOCs collected at one rack passing to another rack. Vapor Tight	Monthly leak inspection incorporating sight, sound and smell. Document leaks with log book. Initial repair leaks within 5 days. Repair within 15 days.

					Continuous monitoring of organic emissions, or parametric monitoring of VPU, with defined action plan for deviations.
	Terminals and plants with throughput < 250,000 gal/day	Must not allow vapor releases for extended periods.	none	Load using submerged fill •	Monthly leak inspection incorporating sight, sound and smell. Document leaks with log book. Initial repair leaks within 5 days. Repair within 15 days.
Reg. 8, Rule 33	Defined as Bulk Terminals	100 ppm or 500 ppm for equipment subject to Reg. 8-18 Current: 100% LEL for vapor tight. Proposed: 3000 ppm for gasoline bulk terminal specialty equipment.	Current: 0.08 lb/K gal. Proposed: 0.04 lb/K gal	Meet CARB certification requirements.	Meet applicable federal requirements.
Reg. 8, Rule 39	Defined as Bulk Plants	100 ppm or 500 ppm for equipment subject to Reg. 8-18 Current: 100% LEL for vapor tight. Proposed: 3000 ppm for gasoline bulk terminal specialty equipment.	Current: 0.5 lb/K gal.	Meet CARB certification requirements.	Meet applicable federal requirements.

VIII. District Staff Impacts

Implementation of the proposed amendments is expected to clarify and support effective enforcement of these rules. However, no net savings in inspector time is anticipated. Parametric monitoring requirements will require District review and approval. Facility inspection, monitoring, notification and reporting plans will require District review and approval. These plans will help the District enforcement staff when inspecting a facility. District human resource requirement for the review and approvals needed are estimated to be 23 staff – weeks.

IX. Rule Development Process

The 2005 Ozone Strategy Control Measure SS-7 caused the District to consider amendments to Regulations 8-33 and 8-39 to reduce organic compound emissions at gasoline bulk terminals and gasoline bulk plants and to tighten loading standards of gasoline cargo tanks. At meetings on December 6, 2004 and October 27, 2005, during development of the Ozone Strategy, District staff consulted informally with representatives from the Western States Petroleum Association and gasoline bulk terminal operators about possible amendments to Regulation 8-33. In 2006, District staff notified the owners or operators of all of gasoline bulk plants and terminals located in the District's jurisdiction of the District's intention to amend the regulations and to verify the facilities' 2005 gasoline loading throughputs in order to update the District's emission inventory. Staff met with WSPA again on July 14, 2008 to review progress and discuss issues.

Staff conducted two public workshops on Monday, October 6, 2008 to review proposed amendments to each rule. Comments were received at the workshops, and additional written comments were received from KinderMorgan, BP, Tesoro, and Western States Petroleum Association (WSPA). Staff then met with WSPA representatives on Friday, October 31, 2008 and conducted a conference call with them on Friday, November 21, 2008. Staff incorporated their comments into the current proposed amendments, as appropriate.

Staff visited bulk terminals at Valero, ConocoPhillips, and KinderMorgan, and a bulk plant at Moffett Field to develop an understanding of each facility's operational and emissions control issues and receive input on how to further reduce emissions. Staff visited a cargo tank maintenance facility at KAG West (a bulk petroleum common carrier) to improve understanding of how cargo tanks operate, and how cargo tanks are designed and operated to limit emissions. Staff visited Travis Air Force Base to witness an innovative fuel loading control system that prevents cargo tank overfills.

Staff first published proposed amendments for public comment on December 30, 2008. Staff received several oral comments from terminal operators, environmental staff, and WSPA on the initial proposal. Tesoro suggested a clarification to the limited exemption for source testing requirements of its unique vapor treatment system. This minor

clarification has been incorporated into the rule. A representative of WSPA suggested a clarification regarding use of a portable maintenance container that was incorporated into the rule language. WSPA suggested a future effective date for one specific provision of the proposed amendments so that it would comport with the future effective date of related requirements, and staff has incorporated this future effective date into the rule. WSPA also suggested delaying rule implementation at least 90 days to provide adequate time for personnel training, and to establish adequate record keeping systems. Staff incorporated an effective date of July 1, 2009 into the rules where appropriate. Staff will issue a compliance advisory to notify affected parties of the effective date.

Legal review of sections of the California Health and Safety Code that set jurisdictional authority for standards for gasoline bulk terminals, bulk plants, and cargo tanks, and consultation with CARB staff, lead District staff to proposed amendments that did not include a lower vapor leak standard for terminal and bulk plant connectors and pressure/vacuum valves. On October 3, 2008, a letter was sent to CARB requesting formal guidance on this matter. Staff received CARB's response, indicating that the District does have legal authority to set vapor leak standards on January 29, 2009.

On February 4, 2009, the District's Board of Directors held a public hearing on proposed amendments to Rules 8-33 and 8-39. During the hearing, Staff informed the Board and members of the public who were present that CARB had confirmed the District does have the authority to set lower vapor leak standards. Staff recommended that a 3,000 ppm vapor leak standard be set. The Board agreed that it should consider a lower vapor leak standard for Rules 8-33 and 8-39, and decided to continue the February 4 Public Hearing to March 4, 2009 to provide an opportunity for public input on this new proposal.

Staff published a written proposal with the lower leak standard on February 9, 2009. Staff received comments on the proposal, relating to the potential for increased violations, a provision relating to shutdown of the affected loading arm or affected portion of the vapor recovery system when leaks are discovered, and a request for a repair period to resolve any self-discovered vapor leaks. Staff agrees that a repair period is appropriate, and thus the current proposal includes an 8 hour repair period for connector leaks (72 hours for P/V valve leaks) when facility personnel discover these leaks. A summary of the written comments received both prior to the February 4, 2009 hearing and subsequent to the February 9, 2009 proposal, and staff's responses to those comments, is attached hereto as Appendix A.

On March 11, 2009, Staff published the current proposed amendments to Rules 8-33 and 8-39, staff report, Socio-economic analysis and CEQA analysis and requested comments on the proposal through March 31, 2009. No written comments have been received on this final proposal.

X. 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 supplement the District's ability to attain the State one-hour and eight-hour ozone standards, and meet the requirements of the Bay Area 2005 Ozone Strategy;
- Authorized by California Health and Safety Code Sections 40000, 40001 and 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
- Implementing, interpreting or making specific the provisions of the California Health and Safety Code Sections 40000 and 40702.

A socioeconomic analysis prepared by Applied Development Economics has found that the proposed amendments would not have a significant economic impact or cause regional job loss. District staff have reviewed and accepted this analysis. A California Environmental Quality Act analysis prepared by Environmental Audit, Inc., concludes that the proposed amendments would not result in adverse environmental impacts. District staff have reviewed and accepted this analysis as well. The CEQA documents were made available for public comments and no comments were received. A CEQA Negative Declaration is proposed for adoption by the Board of Directors.

Staff recommends the adoption of the proposed amendments to Regulation 8, Rule 33: *Gasoline Bulk Terminals and Gasoline Delivery Vehicles, and* Regulation 8, Rule 39: *Gasoline Bulk Plants and Gasoline Delivery Vehicles;* and approval of the CEQA Negative Declaration.

XI. References

1. American Petroleum Institute. 2003. Bottom Loading and Vapor Recovery for MC-306 and DOT-406 Tank Motor Vehicles. API Recommended Practice 1004, Eighth Edition, January 2003.
2. Bay Area Air Quality Management District. 2006. Bay Area 2005 Ozone Strategy, January 2006.
3. California Air Resources Board. 1999. Gasoline Cargo Tank Technical Manual – Compliance Assistance Program.
4. Unites States Environmental Protection Agency. 1995. Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fifth Edition. Office of Air Quality Planning and Standards. AP-42. Research Triangle Park, NC. January 1995.
5. Environmental Protection Agency, 40 CFR 60, Standards of Performance for New Stationary Sources, Subpart XX – Standards of Performance for Bulk Gasoline Terminals
6. Environmental Protection Agency, 40 CFR 63, National Emissions Standards for Hazardous Air Pollutants for Source Categories, Subpart R – National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout stations)
7. Environmental Protection Agency, 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart BBBBBB - Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities; Final Rule,
8. California Air Resources Board, Vapor Recovery Definitions, D-200, May 25, 2006
9. California Air Resources Board, Certification Procedure for Vapor Recovery Systems of Bulk Plants, CP-202, March 17, 1999
10. California Air Resources Board, Certification Procedure for Vapor Recovery Systems of Terminals, CP-203, March 17, 1999
11. California Air Resources Board, Certification Procedure for Vapor Recovery Systems of Cargo Tanks, CP-204, March 17, 1999
12. California Air Resources Board, Determination of Emission Factor of Vapor Recovery Systems of Bulk Plants, TP-202.1, March 17, 1999
13. California Air Resources Board, Determination of Emission Factor of Vapor Recovery Systems of Terminals, TP-203.1, March 17, 1999
14. California Air Resources Board, Determination of Leak(s), TP-204.3, March 17, 1999
15. California Air Resources Board, Letter regarding BAAQMD authority to set vapor leak limits. January, 28, 2009.

Appendix A

Written Comments and Responses

Appendix A: Comments and Responses

Staff received 7 written comments during the public comment period between December 30, 2008 and January 22, 2009:

- from Ron Zinner, Kinder Morgan, in three e-mails on January 12, 2009;
- from Todd Tamura, representing Western States Petroleum Association ("WSPA"), in three e-mails on January 13 and January 21, 2009; and
- from Dave Brown of the California Air Resources Board in a letter dated January 22, 2009.

Ron Zinner, Kinder Morgan, January 12, 2009 e-mails:

- **Comment:** Kinder Morgan voiced concern about the equation in 8-33-309.13.1 used to calculate the parametric hydrocarbon concentration limit from the vapor treating unit, and whether the equation was appropriate for thermal oxidizers.
- **Response:** The equation is designed to account for the wide variation of vapor flow rates through carbon absorption systems, created primarily by the regeneration cycle and purging steps for regenerated carbon drums. Rather than allow that variability to influence the "target" hydrocarbon concentration for each vapor treatment unit outlet, staff set the ratio of gasoline vapor displaced by liquid loading equal to the volume of gasoline vapors entering the vapor treatment unit, thus eliminating the variation induced by the regeneration cycles of carbon absorption systems. Staff believes this equation provides a fair and consistent parametric outlet hydrocarbon concentration target for each facility. The specific concern raised regarding a thermal oxidizer versus a carbon absorption system is accounted for by the span gas each unit uses for calibration.

- **Comment:** Kinder Morgan suggested establishing a de minimis amount of product that would be exempt from the vapor tight and liquid leak standards when using a portable maintenance container to prepare equipment for maintenance work.
- **Response:** Staff does not believe it is necessary or prudent to establish a de minimis amount of product to exempt from leak standards during maintenance. The exemption provided in 8-33-113 requires that, during maintenance and repair activities, bulk terminals employ proper operating practices to minimize evaporation "to the greatest extent practicable." Staff believes this rule allows District inspectors to use reasonable judgment, and enables the facility to make a good faith effort to minimize liquid spills and subsequent evaporation as appropriate and practicable under the circumstances.

Todd Tamura, representing WSPA, e-mail on January 13, 2009:

- **Comment:** WSPA requested that terminals be permitted to use their existing handheld hydrocarbon analyzers, most of which measure hydrocarbon in percentage of Lower Explosive Limit (LEL), to meet the monitoring requirements in 8-33-308.2 and 8-33-309.8 by stating the vapor limit in % of LEL, or by adding the phrase "or the equivalent" after each of the existing vapor leak standards.
- **Response:** The definition 8-33-215 specifies CARB CP-203 as the standard for Vapor Tight. CARB CP-203 establishes the vapor tight limit at 100% of LEL, and references CARB TP-204.3 as the test procedure to determine leaks. CARB TP-204.3 also states that EPA Method 21 procedures and monitors are an accepted alternative to TP 204.3. 8-33-308.1 currently sets the vapor limit for the vapor storage tank vapor space at 3000 ppm (as methane), so the phrase, "6% of the Lower Explosive Limit, or" has been added to 8-33-308.1 to clarify that existing hydrocarbon analyzers that measure in units % LEL are adequate, as long as they meet the requirements of TP-204.3. The vapor standard for 8-33-309.8 is currently, and will remain 100% of LEL.
    - This response is now modified to accommodate the reduced vapor leak standard. As such, the 8-33-309.8 vapor leak free standard is defined by 8-33-216 as 3000 ppm (expressed as methane) or 6% of the Lower Explosive Limit (LEL), measure according to the procedure set forth in CARB TP-204.3, Determination of Leak(s).

- **Comment:** WSPA requested the addition of "or pressure alarm status" to the reporting requirements each time the high pressure alarm system activates, as cited in 8-33-505.

- **Response:** Staff is aware that certain pressure - alarm systems function by measuring pressure, triggering an alarm at or above a designated pressure reading, and recording when the alarm is triggered. Staff intended that facilities be able to utilize these systems and thus record "alarm status" as an alternative to recording the pressure upon alarm status because either alternative achieves the desired result of monitoring pressure and taking action upon reaching 18 inches of water column. Staff believes the availability of this approach is clear in the language of 8-33-309.11 and 309.12. Staff has made a minor modification to 8-33-505 to clarify the availability of this approach.

Todd Tamura, representing WSPA, e-mails on January 21, 2009:

- **Comment:** WSPA raised the concern that the language in 8-33-304.5 and 306 regarding draining of small amounts of liquid gasoline from cargo tanks or terminal equipment is infeasible because it prohibits handling gasoline "in any manner that would result in its evaporation to the

atmosphere." WSPA proposed adding the following sentence to both 8-33-304.5 and 306: "Buckets, drip pans, etc. can be used for purposes of collecting small volumes of liquid (less than one gallon) from operational activities, but their contents must be promptly transferred to a leak-free container once that activity has been completed."

- **Response:** The requirements now described in 8-33-304.5 and 306 have been part of this rule since its adoption on November 30, 1983; the requirements were previously stated only in 8-33-306. The intent is to limit emissions by clearly stating that liquid gasoline drained or spilled must be properly contained and disposed of. The word "drain" has been added to further clarify that liquid gasoline can not be intentionally drained from cargo tanks or terminal/bulk plant equipment without proper containment and disposal. 8-33-113 provides an exemption for small amounts of liquid drained from equipment that may result from maintenance, provided operating practices are employed to minimize evaporation of gasoline into the atmosphere to the greatest extent practicable. Staff supports continued use of open containers (drip pans, buckets, small containers) to recover such drainage and spills from maintenance procedures and from normal operations when necessary, provided any liquid in open containers is transferred to a closed system as soon as possible, as previously stated in the Staff Report (p 18). District inspection staff concurs with this practice. By January 10, 2012, when each facility is required to have a portable maintenance container, most liquids will be able to be drained directly into these closed containers.

- **Comment:** WSPA provided staff with vapor storage tank inspection records and failure data and proposed that the vapor leak testing requirements be reduced from daily to weekly.

- **Response:** Vapor leaks from bladders in vapor storage tanks typically take 7 – 11 years to develop, and begin slowly with a small crack and leak rather than a catastrophic failure. Based on the new data provided, Staff agrees that weekly monitoring will achieve the same result as daily monitoring; rule language has been modified to require weekly monitoring.

Dave Brown, California Air Resources Board, letter via e-mail dated January 22, 2009:

- **Comment:** ABR staff stated they have no comments on the proposed amendments.

Subsequent to the initial public hearing on February 4, 2009, staff posted a notice of the continuation of the hearing and a request for comments on the proposed lower vapor leak standard. Staff received one comment during the comment period from February 9, 2009 through February 19, 2009, from Dennis Bolt, WSPA.

Dennis Bolt, Western States Petroleum Association, via e-mail dated 2/19/2009:

- **Comment:** WSPA voiced concern about the vapor leak limit during gasoline loading, where 3000 ppm is the limit for the terminal, and 100% of LEL is the limit for the cargo tank. The concern is that the terminal would be cited for any leak greater than 3000 ppm but less than 100% of LEL.

- **Response:** Enforcement policy provides guidance requiring the inspector to determine the specific source of the leak before issuing any notice of violation.

- **Comment:** WSPA voiced concern about the requiring shutdown of the loading arm or affected portion of the vapor recovery system for a minor vapor leak of 3000 ppm, without a reasonable repair period. WSPA has proposed a 72 hour repair period.

- **Response:** Staff agrees that self-discovered leaks should have a reasonable opportunity to be repaired. Staff proposes an 8 hour period to repair or remove from service a leaking loading arm or affected portion of a leaking vapor recovery hose. This allows enough time to make repairs past peak loading periods. Staff proposes 72 hours to repair or shutdown the affected portion of the vapor recovery system for a leaking Pressure/Vacuum valve. Repairing a leaking P/V valve may require more time than other leaks, although it is expected that terminals will keep repair or replacement equipment on site.

Inclusion of repair periods is a substantial change to the proposal to reduce vapor leak limits, so the proposed rules and support documents will again be posted for public comment. During the period of finalizing the documents for posting, two additional comments were received from Dennis Bolt, WSPA.

Dennis Bolt, Western States Petroleum Association, via e-mail dated 3/10/2009:

- **Comment:** WSPA requested the effective date of the reduced vapor leak limit for pressure/vacuum valves be delayed until January 10, 2011 to coincide with the effective date of the requirement for sample lines to the P/V valves, and the monitoring requirement.

- **Response:** The rule provides a July 1, 2009 effective date for the reduced vapor leak limit. District source test and inspection data indicates that the reduced vapor leak limit of 3000 ppm is already being achieved, where proper inspection and maintenance procedures are in place. Staff believes the lower standards should become effective as soon as possible. Sample lines provide easy access to inaccessible P/V valves, making self-inspection less onerous. Sample lines are part of the overall monitoring requirements and staff has proposed that these requirements be implemented concurrently and coordinate with federal monitoring requirements. The earlier effective date for the reduced vapor leak standard not only comports with the standard already being achieved in practice, but also provides an incentive to each facility to install sample lines to the inaccessible P/V valves as soon as possible so that the facilities can more easily conduct self-inspections (and thus discover and repair leaks and avoid receiving Notices of Violation), rather than wait until 2011 when sample lines and self-inspections will be required.

- **Comment:** WSPA opposes the lack of a repair period if the District finds a leak. WSPA advocates that a facility that properly follows their inspection and repair program should not receive a Notice of Violation for an equipment failure that occurs after the last inspection.

- **Response:** Each facility's inspection and repair program should be designed and continuously improved to ensure their connectors and P/V valves meet the vapor and liquid leak requirements. If facilities properly implement self-inspection programs, facilities should discover and repair leaks quickly and remain in compliance. If District inspectors discover a leak at a facility, District Enforcement Policy provides for discretion on the proper enforcement tool (Notice to Comply; Notice of Violation; no enforcement necessary) depending on the circumstances of the violation and the potential for it to be repaired immediately. A leaking component

when the inspector is present could indicate a self-monitoring program that is inadequate for the volume of gasoline throughput.

Appendix B

Socioeconomic Analysis

SOCIO-ECONOMIC IMPACT ANALYSIS

PROPOSED AMENDMENTS TO REGULATION 8, RULES 33 AND 39 (GASOLINE BULK TERMINALS AND GASOLINE BULK PLANTS)

MARCH 11, 2009

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

The Bay Area Air Quality Management District seeks to reduce emissions of volatile organic compounds at gasoline bulk terminals and gasoline bulk plants through improved facility operations and more stringent standards for gasoline cargo tank loading operations. To this end, the District has promulgated Regulation 8, Rule 33 (Gasoline Bulk Terminals) and Regulation 8, Rule 39 (Gasoline Bulk Plants), which the District now seeks to amend.[1]

Based on a review of the existing rules and District staff's experience monitoring and inspecting Bay Area gasoline bulk terminals and bulk plants, a set of amendments is proposed to Regulation 8-33 and Regulation 8-39 to reduce organic emissions, enhance the safety of gasoline bulk terminal and bulk plant operations, and improve the enforceability of the rules. The proposed amendments include:

- A reduction in the allowable emission limit; and a requirement to monitor vapor recovery system performance to ensure the vapor recovery system operates properly;
- A reduction of vapor leak standards and liquid leak standards in the rules, and a repair period address leaks found by self inspection;
- A requirement that loading arm connectors and cargo tank vapor recovery connectors are compatible prior to gasoline loading, and meet the vapor and liquid leak standards;
- A requirement to install pressure sensors to monitor vapor collection piping backpressure, and an alarm or automatic shutdown if backpressure exceeds 18 inches water column;
- A requirement to install block or vapor check valves in each loading rack vapor collection header to minimize emissions when maintenance is required;
- A requirement that vapor hose connectors are stored out of the way of the truck driveway to prevent damage to the connectors, which can be a significant source of VOC leakage;
- A requirement to monitor vapor storage tank airspace emissions to ensure all leaks are discovered and repaired quickly;
- A requirement to install sample lines on the pressure and vacuum sides of inaccessible pressure/vacuum valves to provide ready access to check for leaks;
- A requirement to further control the release of organic compounds during operational, maintenance and repair operations.
- A requirement for an APCO-approved vapor recovery system monitoring, inspection, notification and reporting protocol.
- A requirement that plants and terminals apply for new or revised certifications of their equipment with the California Air Resources Board (CARB) if substantive changes are made to their existing equipment.
- Revision to definitions and updates to source test requirements to be consistent with federal and state requirements.

[1] Gasoline bulk terminals and gasoline bulk plants are intermediate facilities that distribute gasoline, gasoline additives and other fuels, such as ethanol, by gasoline cargo tanks to service stations and local businesses. Gasoline bulk terminals also distribute refined fuels to gasoline bulk plants.

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 socioeconomic analysis methodology, 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 1997 and 2007. After an overview of Bay Area industries, we focus on industries impacted by the proposed amendments to Regulation 8, Rules 33/39. 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 to Regulation 8, Rules 33/39 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 would affect businesses in a narrow set of related industries, namely petroleum bulk terminal facilities and petroleum bulk plants. With this information we profiled impacted businesses and industries, analyzing data on the number of jobs, sales levels, the typical profit ratios, and other economic indicators for Bay Area businesses.

With data from the US Economic Census and other sources such as US IRS, California Employment Development Department, and the District, ADE was able to estimate revenues and profit ratios for industries impacted by the proposed rule amendments, as well as describe trends in the number of petroleum bulk terminals and bulk plants.

In calculating aggregate revenues generated by Bay Area businesses in affected industries, ADE first estimated annual revenue based upon available data, particularly the US Economic Census. ADE calculated ratios of profit per dollar of sales for the businesses and industries on which the analysis focused. 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 businesses and industries are likely to reduce jobs as a means of recouping the cost of compliance or as a result of reducing business operations. Where applicable, ADE also examines whether affected industries can pass costs to consumers. To the extent that such job losses appear likely and significant, 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 this 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. The California Air Resources Board (ARB) has incorporated the methodologies described in this report in its own assessment of socioeconomic impacts of rules generated by ARB. One methodology relates to determining a level above or below which a rule and its associated costs is deemed to have significant impacts. When analyzing the degree to which its rules are significant or insignificant, ARB employs a threshold of significance that ADE follows. Berck reviewed the 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."

REGIONAL DEMOGRAPHIC TRENDS

The Bay Area experienced moderate population growth from 1997 to 2007. In the five-year period between 1997 and 2002, the nine-county region increased by 1.1 percent annually, from 6.6 million in 1997 to almost 6.9 million in 2002. From 1997 to 2007, the population increase was from 6.6 million to 7.2 million for an increase of slightly less than one percent annually. In other words, the Bay Area grew at a slower pace between 2002 and 2007 relative to 1997 and 2002. Over the ten-year period stretching from 1997 to 2007, 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 1997 to 2007 Contra Costa increased its population by 1.6 percent annually. All other Bay Area counties had population increases slower than Contra Costa County and the State. The smallest percentage increase occurred in San Mateo County where population grew annually by 0.4 percent from 1997 to 2007.

TABLE 1
POPULATION TRENDS: SAN FRANCISCO BAY AREA

	Population			Annual Percent Change		
	1997	2002	2007	97-02	02-07	97-07
California	32,670,019	35,088,671	37,662,518	1.4%	1.4%	1.4%
Bay Area	6,566,939	6,943,440	7,217,424	1.1%	0.8%	0.9%
Alameda County	1,381,705	1,483,623	1,526,148	1.4%	0.6%	1.0%
Contra Costa County	887,065	983,360	1,042,341	2.1%	1.2%	1.6%
Marin County	241,412	250,090	255,982	0.7%	0.5%	0.6%
Napa County	120,095	128,282	135,969	1.3%	1.2%	1.2%
San Francisco County	772,834	788,971	808,844	0.4%	0.5%	0.5%
San Mateo County	704,834	715,072	733,496	0.3%	0.5%	0.4%
Santa Clara County	1,654,833	1,716,105	1,808,056	0.7%	1.0%	0.9%
Solano County	375,512	408,923	424,823	1.7%	0.8%	1.2%
Sonoma County	428,649	469,014	481,765	1.8%	0.5%	1.2%

Source: ADE, Inc., based 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 2002 and 2007, the Bay Area economy had not grown significantly with respect to employment, which contrasts with the relatively robust employment growth in the Bay Area between 1997 and 2002.

As Table 2 shows, as of 2007, the professional and business services sector was the largest employer in the region, at 581,742 jobs or 17.5 percent of all private and public sector jobs. In 1997, professional and business services also accounted for 17.5 percent of all Bay Area employment. While professional and business service decreased annually by a slight rate of 0.34 percent between 1997 and 2002, between 2002 and 2007 employment increased in this sector by an annual clip of 1.13 percent. In terms of share of total employment, healthcare\private education and manufacturing sectors are the next largest sector, boasting 11.1 percent and 10.4 percent of total jobs in the Bay Area. In the state as a whole, healthcare\private education and manufacturing comprise 10.4 percent and 9.3 percent of all jobs, meaning the Bay Area has a slightly greater advantage in these sectors that provide a wider breadth of career mobility opportunities relative to many other sectors and industries.

At 10.2 percent, retail is the fourth largest employing sector, followed by leisure and hospitality, all three of which tend to pay less than manufacturing and healthcare. While retail slightly declined by 0.2 percent per year between 2002 and 2007, leisure increased by a robust clip of almost two percent per year in the Bay Area.

Another large industry in the Bay Area is public service, or government, with 446,000 jobs, or 13.2 percent of the total. Within the public sector, employment had risen fastest since 2002 in state government, whereas local government employment actually declined by 0.3 percent annual pace between 2002 and 2007. Employment in federal agencies declined annually by a greater amount, at 1.68 percent annual clip over the five year period between 2002 and 2007.

Overall, since 2002, total public and private employment in the Bay Area changed slightly at 0.12 percent per year between 2002 and 2007, going from 3,312,548 workers in 2002 to 3,332,658 workers in 2007. In comparison, in the five-year period between 1997 and 2002, employment grew in aggregate from 3,182,044 to 3,312,548, for a yearly growth of 0.81 percent.

TABLE 2
EMPLOYMENT PROFILE OF THE SAN FRANCISCO BAY AREA, 1997-2007

Industry	1997	2002	2007	% of Total Private and Public Employment in 2007: Bay Area	% of Total Private and Public Employment in 2007: California	Annual Percent Chg, 97-02	Annual Percent Chg, 02-07
Total, all private industries	**2,765,671**	**2,860,813**	**2,886,583**			**0.68%**	**0.18%**
Goods-Producing	637,975	612,864	559,837			-0.80%	-1.79%
Natural Resources and Mining	27,991	27,570	22,510	0.7%	2.6%	-0.30%	-3.97%
Construction	142,100	182,399	192,229	5.8%	5.7%	5.12%	1.06%
Manufacturing	467,884	402,895	345,098	10.4%	9.3%	-2.95%	-3.05%
Service-Providing	2,127,696	2,247,949	2,326,746			1.11%	0.69%
Trade, Transportation, and Utilities	580,609	580,925	576,997			0.01%	-0.14%
Retail	326,010	340,881	340,519	10.2%	10.8%	0.90%	-0.02%
Wholesale	131,533	129,192	124,943	3.7%	4.6%	-0.36%	-0.67%
Transportation\Warehouse\Utilities	123,066	110,852	111,535	3.3%	3.1%	-2.07%	0.12%
Information	103,464	124,190	113,082	3.4%	3.0%	3.72%	-1.86%
Financial Activities	188,631	209,626	206,370	6.2%	5.8%	2.13%	-0.31%
Professional and Business Services	559,140	549,827	581,742	17.5%	14.4%	-0.34%	1.13%
Education and Health Services	297,240	348,361	370,398	11.1%	10.4%	3.22%	1.23%
Leisure and Hospitality	278,231	300,502	330,689	9.9%	9.9%	1.55%	1.93%
Other Services	120,381	134,518	147,468	4.4%	4.9%	2.25%	1.86%
Federal Government	57,233	56,887	52,279	1.6%	1.6%	-0.12%	-1.68%
State Government	80,249	84,600	87,550	2.6%	2.9%	1.06%	0.69%
Local Government	278,891	310,248	306,246	9.2%	11.0%	2.15%	-0.26%
Total, all public and private industries	**3,182,044**	**3,312,548**	**3,332,658**	**100.00%**	**100.00%**	**0.81%**	**0.12%**

Source: ADE, Inc., from data supplied by the Labor Market Information Division of the California Employment Development Department

DESCRIPTION OF AFFECTED INDUSTRIES

Gasoline bulk terminals and gasoline bulk plants are intermediate facilities that distribute gasoline, gasoline additives, and other fuels, such as ethanol, by gasoline cargo tanks to service stations and local businesses. Gasoline bulk terminals also distribute refined fuels to gasoline bulk plants. Table 3 traces ten-year's worth of data on petroleum bulk plants and bulk terminals. Right now, there are 45 establishments in the nine-county San Francisco Bay Area, down by three since 2002 and by 11 since 1997. In 1997, the average establishment employed 30 workers whereas now, the average employs approximately 20 workers. While the number of establishments and employees has declined over the past ten years, and while bulk plants and terminals have become smaller on average, these industries continue to pay relatively good annual wages, at $77,100 (average) in 2007.

TABLE 3
PETROLEUM BULK STATIONS AND TERMINALS TRENDS: SAN FRANCISCO BAY AREA, 97-07

				---- Change ----		- Annual Per Chg -	
Bulk Stations & Terminals	**1997**	**2002**	**2007**	**97-02**	**02-07**	**97-02**	**02-07**
Establishments	56	48	45	-8	-3	-3%	-1%
Employment	1,699	1,305	932	-394	-373	-5%	-7%
Average Wages ($2007)	$74,408	$80,359	$77,075	5,951	-3,284	2%	-1%

Source: ADE, Inc., based on California EDD, US Economic Census (Geographic Area Series: California: Wholesale Trade), and Bay Area Air Quality Management District

Of the 45 bulk plant and terminal establishments operating in the nine-county region, 28 will be subject to one of the rules. Table 4 below provides additional economic data on the 28 affected bulk terminals and plants in the region. Of the 28, 14 are bulk terminals and 14 are bulk plants. Of the 14 bulk terminals, five are oil refineries, which explain why the aggregate revenue for the 14 establishments is an estimated $5.7 billion. Combined, the bulk terminals and bulk plants generate an estimated $5.9 billion in aggregate revenues, off of which are generated $336 million in after-tax net profits, for an overall net profit rate of approximately 5.7 percent. In large part, this overall net profit rate is attributable to the oil refineries, which generate an estimated 5.8 after-tax net profit rate. In contrast, bulk plants after-tax net profit rate is only one percent.

TABLE 4
ECONOMIC PROFILE OF PETROLEUM BULK STATIONS & TERMINAL: SAN FRANCISCO BAY AREA

Petroleum Bulk Stations & Terminals	Establishments	Est. Revenues	Est. Net Profits
Bulk Terminals	14	$5,737,508,588	$334,713,799
Bulk Plants	14	$165,904,346	$1,651,246
	28	$5,903,412,935	$336,365,045

Source: ADE, Inc., based on data from the US Economic Census, 2002 (Geographic Area Series: California: Wholesale Trade)($2007) and corporate annual reports (Valero, Tesoro, Chevron, ConnocoPhillips), US Internal Revenue Service, and BAAQMD.

3. SOCIOECONOMIC IMPACT ANALYSIS

This section of the report examines the socioeconomic impact analysis of proposed amendments to Regulation 8, Rules 33/39. As indicated above, approximately 28 establishments will fall within the purview of the rule as amended. A number of these establishments are oil refineries, meaning that even as these refineries operate stand-alone bulk terminals and or bulk plant operations, costs associated with the proposed amendments can and will be passed to the refineries that these terminals and plants are a part of.

Table 5 below summarizes costs associated with the proposed amendments to Regulation 8, Rules 33/39. While the District is proposing a more stringent emissions limit for bulk terminal facilities, many are already in compliance with standards established in the proposed amendments, meaning that not all bulk terminal facilities will be subject to $46,900 to $65,700 in costs described below. For purposes of a conservative analysis, we assume all 14 bulk terminal facilities will bear $46,900 to $65,700 in annual costs stemming from the proposed amendments.[2] For bulk plant facilities, annual costs stemming from the proposed amendments are very small, at an estimated $2,500 per year per facility.

TABLE 5
ANNUAL COSTS: PROPOSED AMENDMENTS TO REGULATION 8, RULES 33 AND 39

Amendment	Associated Annual Costs	Annual Cost Per Bulk Terminal	Annual Cost Per Bulk Plant
A. Reduce Emission Limits	Parametric monitoring	$18,000	
B. Reduce Vapor and Liquid leak Standards		$1,000	$100
C. Vapor Recovery Connections	Facility counterweight adjustment	$200	$200
D. Pressure Monitors	Back pressure monitor per loading rack, plus	$10,800	
* assume typical of 4 loading racks at each terminal	Alarm system, ***or***	$13,600	
	Automatic shut-off system per loading rack	$32,400	
	Pressure gauge system		$700
E. Block Valves or Vapor Check Valves Per Vapor Recovery System		$800	
* assume typical of 4 loading racks at each terminal			
F. Vapor Recovery Hose Connector Hanger		$400	
* assume typical of 4 loading racks at each terminal			
G. Monitor Vapor Storage Tank emissions manually		$200	
H. Install Sampling Lines on Pressure Valves	Install sample lines	$1,000	$600
* assume typical of 5 P/V valves at each terminal			
I. Minimize Release of Vapors	Slop tanks or portable containers	$900	$900
K. Require APCO-Approved Emissions Monitoring			
L. Require Updated CARB Certification			
M. Editorial Changes			
	Total Per Terminal or Per Plant Costs	**$46,900 - $65,700**	**$2,500**

Source: Bay Area Air Quality Management District

[2] The reason bulk terminal costs are presented as a range ($46,900 to $65,700) is because affected establishments will either pay an estimated $13,600 in alarm system costs or $32,400 in automatic shut-off system per loading rack costs, but not both.

As noted above, impacts are evaluated by comparing compliance costs to net profits. At 0.22-to-0.31 percent and 2.03 percent, bulk terminals and bulk plants are not significantly impacted, respectively, by costs stemming from the proposed amendments, when costs are expressed as a percent of estimated net profits. These impacts fall far short of the ten-percent threshold used for the purposes of determining when costs are significant or not.

TABLE 6
SOCIOECONOMIC IMPACT ANALYSIS: PROPOSED AMENDMENTS TO REGULATION 8, RULES 33 AND 39

Petroleum Bulk Stations & Terminals	Establish-ments	Est. Revenues	Est. Net Profits	Annual Costs: Maximum Scenario	Cost As Percent of Net Profits	Significance
Bulk Terminals	14	$5,737,508,588	$334,713,799	$734,400 - $1,035,200	0.22% - 0.31%	< significant
Bulk Plants	14	$165,904,346	$1,651,246	$33,600	2.03%	< significant
	28	$5,903,412,935	$336,365,045	$768,000 - $1,058,800	0.23% - 0.32%	< significant

Source: ADE, Inc.

DEFINITION OF A SMALL BUSINESS

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[3]. To be eligible for small business certification, a business:

- 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

In analyzing the revenue profiles of the bulk terminals and bulk plants that are not oil refineries, we have determined that none generate less than $10 million in annual revenues. As a result, none are small businesses. Using data from the United States Economic Census, 2002 (Geographic Area Series: California: Wholesale Trade), we have determined that bulk terminals in the San Francisco Bay Area as a whole generated an estimated $5.7 billion in revenues. Controlling for revenues generated by oil refineries, bulk terminals that are not refineries generated $1.2 billion (rounded) in aggregate revenues, for an average of $119 million.

[3] State of California. Department of General Services. "California Small Business Certification" (http: www.pd.dgs.ca.gov/smbus/sbcert.htm)

The 14 bulk plant facilities subject to the rule as amended generate, on average, $12 million in revenues. While this average suggests bulk plants are not small businesses, anecdotal information suggests that a number of the impacted 14 bulk plant facilities are small businesses. Table 7 below distributes the 14 bulk plant establishments by number of workers. For each size category, we include corresponding revenue, net profit and impact estimates. Table 7 shows that establishments employing no more than ten workers are small businesses since, on average, these establishments annually generate less than $10 million. Thus, of the 14 bulk plant facilities subject to the proposed amendments, ten are small businesses. As the table below shows, these businesses are not impacted by the proposed amendments in a significant manner, meaning that the proposed amendments do not disproportionately impact small businesses.

Table 7
Socioeconomic Impact Analysis: Proposed Amendments To Regulation 8, Rules 33 and 39: Small Business Disproportionate Impact Analysis: Bulk Plants Only

Number of Workers	Establishments By Size	Aggregate Revenue Est.	Average Revenue	Small Business	Aggregate Net Profit Est.	Aggregate Bulk Plant Costs @ $2,500 Per Facility	Agg Cost as Percent of Agg Net Profits	Significance
All	14	$165,904,346	$11,850,310		$1,651,246	$35,000	2.1%	less than sig.
1-4 workers	4	$13,048,656	$3,262,164	yes	$129,873	$10,000	7.7%	less than sig.
5-9	3	$19,572,985	$6,524,328	yes	$194,810	$7,500	3.8%	less than sig.
10-19	5	$69,903,517	$13,980,703	no	$695,750	$12, 500	1.8%	less than sig.
20-49	2	$63,379,189	$31,689,594	no	$630,813	$5,000	0.8%	less than sig.
50-99								
100-249								
250-499								
500-999								
>1000								

Source: ADE, Inc., based on US Census Metro Business Patterns (2006), US Economic Census 2002 ($2007) and BAAQMD

Appendix C

California Environmental Quality Act
Initial Analysis and Negative Declaration

Initial Study/Negative Declaration for the Amendments to Bay Area Air Quality Management District Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles and Regulation 8-39: Gasoline Bulk Plants and Gasoline Delivery Vehicles

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Chapter 1

Introduction

PURPOSE OF THIS DOCUMENT

This Negative Declaration assesses the environmental impacts of the proposed adoption of amendments to Regulation 8, Rule 33 (Regulation 8-33) – Gasoline Bulk Terminals and Gasoline Delivery Vehicles, and Regulation 8, Rule 39 (Regulation 8-39) – Gasoline Bulk Plants and Gasoline Delivery Vehicles - 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 Negative Declaration 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 Negative Declaration 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 Negative Declaration 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 8-33 and Regulation 8-39, 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 Bay Area Air Quality Management District (BAAQMD) regulates volatile organic compounds (VOCs) and nitrogen oxide (NO_x) emissions from gasoline bulk terminals, gasoline bulk plants, and gasoline cargo tanks used to distribute gasoline, gasoline additives, refined fuels, and other fuels managed under Regulation 8-33 and Regulation 8-39. The BAAQMD is considering amendments to both regulations to reduce emissions of organic compounds at gasoline bulk terminals and gasoline bulk plants through improved facility operations and more stringent standards for gasoline cargo tank loading. 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 (VOCs and NOx). Control Measure SS-7 of the District's 2005 Ozone Strategy proposed consideration of amendments to both Regulation 8-33, and Regulation 8-39, to reduce both liquid and vapor organic emissions.

PROCESS DESCRIPTION

Gasoline bulk terminals and gasoline bulk plants are intermediate distribution centers where refined fuels are loaded into gasoline cargo tanks for delivery by vehicle to gasoline dispensing facilities ("GDFs" or service stations) and local businesses. Gasoline bulk terminals also deliver gasoline via cargo tank to gasoline bulk plants. Currently, there are fourteen gasoline bulk terminals and fourteen gasoline bulk plants within the District that distribute to service stations. Table 1 identifies the gasoline bulk terminal and bulk plant facilities and their locations. Other bulk plants exist, but are not subject to Reg. 8-39 because they supply diesel, aviation fuels or lubricating oils.

Gasoline Bulk Terminals

Gasoline bulk terminals receive raw gasoline and other fuels and additives that are delivered from refineries by pipeline and from marine tankers and barges, and store these petroleum distillates in tanks on site. Some additives such as ethanol are delivered to terminals using gasoline cargo tanks. At the terminal's truck loading rack, cargo tank operators load gasoline and additives from the terminal's storage tanks into the delivery vehicle's cargo tanks for delivery as refined fuel to gasoline bulk plants, gas stations, and local businesses. A meter at the loading rack records the amount of fuel loaded into each cargo tank. On average, each gasoline bulk terminal in the District dispenses over 800,000 gallons of refined gasoline in a single day.

TABLE 1

Facilities Affected by Proposed Amendments

Facility	Location
Gasoline Bulk Terminals	
BP West Coast Products	Richmond
Chevron Inc.	Richmond
Chevron Products Co.	Martinez
Chevron Products Co.	San Jose
ConocoPhillips	Richmond
Equilon Enterprises, LLC	Martinez
IMTT	Richmond
Kinder-Morgan, LP	Brisbane
Kinder-Morgan, LP	Concord
Kinder-Morgan, LP	San Jose
Shore Terminals	Richmond
ST Shore Terminals	Crockett
Tesoro Refining	Martinez
Valero Refining	Benicia
Gasoline Bulk Plants	
Alves Petroleum, Inc.	Half Moon Bay
JEMCO, Inc. (Royal Petroleum)	Santa Rosa
Napa Valley Petroleum	Napa
NASA – Ames Research Center	Moffet Field (emergency use only)
Pacific Gas and Electric Company	Daly City
Ramos Oil Co.	Fairfield
Redwood Oil Company	Santa Rosa
SF Petroleum Company	San Francisco (gasoline arms removed)
Seaport Petroleum Co.	Redwood City
Tesoro Refining Co.	Martinez
Bay Area/Diablo Petroleum	Martinez
Bay Area/Diablo Petroleum	Brentwood
Toro Petroleum Corp.	Gilroy
Valley Oil Company	Mountain View

The gasoline bulk terminal loading rack includes a loading arm and hose, vapor recovery system and hose, electrical ground line, slop tank, pumps, valves, piping, and a meter to measure the amount of fuel loaded into each cargo tank. The gasoline cargo tank is attached to the bulk terminal loading and vapor recovery equipment and the equipment is grounded. Once the lines are connected, the gasoline cargo tank operators open the tank's internal valve and load the gasoline and gasoline additive into the bottom of the cargo tank below the liquid level, once a level of gasoline is in the cargo tank. This

loading is called "bottom fill" or "submerged loading", the purpose of which is to minimize the formation of gasoline vapors during the loading operation. Gasoline loaded into the cargo tanks displaces the gasoline vapors that were present in the cargo tanks prior to loading. The vapors exit the cargo tanks through the vapor recovery hose to the gasoline bulk terminal's vapor recovery system.

Gasoline Bulk Plants

Gasoline bulk plants receive and store refined fuels that are delivered from gasoline bulk terminals by delivery vehicles. Cargo tank operators load gasoline into cargo tanks at loading racks and deliver gasoline to GDFs and local businesses. In the District, gasoline bulk plants dispense approximately 2,800 gallons of gasoline in a day.

Gasoline loading operations at bulk plants are identical to loading operations performed at gasoline bulk terminals (described above) except that the gasoline vapors generated at GDFs and bulk plants are returned to the bulk terminal for processing via cargo tanks in a process called "vapor balancing." A description of vapor balancing is provided below.

Vapor Recovery Systems

Gasoline vapors generated at service stations and bulk plants are returned to cargo tank trucks using a process called "vapor balancing." Vapors from automobile tanks are collected through vapor recovery nozzles at GDFs when automobiles are filled with gasoline. Vapors also result from evaporation of liquids in storage tanks. These vapors are returned to the cargo tanks as gasoline is transferred from the cargo tanks to GDF storage tanks. Cargo tanks then transport the vapors to gasoline bulk terminals, which receive the vapors during the gasoline loading operations and transfer them to their vapor recovery systems for processing. Gasoline bulk terminal vapor recovery systems also receive and process vapors generated during cargo tank loading operations at the terminals.

In the Bay Area, gasoline bulk terminals utilize several types of vapor recovery systems including carbon adsorption/liquid absorption, thermal incineration, and at one terminal, a fuel gas vapor recovery system.

Carbon adsorption/liquid absorption vapor recovery systems. Ten gasoline bulk terminals in the District have vapor recovery systems that consist of vapor recovery piping from each of the loading racks, and a pair of carbon adsorption or liquid absorption units to recover the organic compounds from the gasoline vapors. These systems are typically used at bulk terminals affiliated with Bay Area refineries. Most Vapor Recovery Units (VRUs) utilize two carbon adsorption beds. The first bed adsorbs organic compounds from the gasoline vapors onto carbon, and then the "cleansed" air vents to the atmosphere. While one carbon adsorption bed operates, the second carbon adsorption bed undergoes regeneration. The carbon is regenerated to remove the organic compounds from the carbon for re-use. Control efficiencies on carbon adsorption units range from 90 to 99 percent.

Thermal incineration vapor recovery systems. Some gasoline bulk terminals choose to burn their hydrocarbon vapors rather than capture and recycle them. This approach is called thermal incineration.

Two gasoline terminals in the Bay Area operate thermal oxidizers. All thermal oxidizers consist of a combustion chamber to combust hydrocarbon vapors aided by auxiliary fuel. Gasoline vapors are heated to ignition temperature and burned to carbon dioxide, water and other air pollutants, including unburned organic compounds. The destruction efficiency of thermal oxidizers ranges from 90% to 99%. The destruction efficiency depends upon the units' combustion temperatures and the residence time of gasoline vapors in the combustion chamber. This approach contributes to greenhouse gases, because supplemental fuel along with these hydrocarbon vapors is burned without any energy recovery mechanism to generate useful work from these fuel sources.

The fuel gas vapor recovery system used in one refinery is a type of thermal incinerator. At the refinery where this system is used, the vapors are routed to and combusted in the refinery's heaters where useful energy is recovered.

OBJECTIVES

In Control Measure SS-7, the District suggested review of VOC emission requirements for gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks. The objective of the amendments for Regulation 8-33 and Regulation 8-39 is to further reduce organic compound emissions from gasoline bulk terminals and gasoline bulk plants through improved facility operations and more stringent standards for cargo tank loading operations in order to reduce ozone levels in the Bay Area and reduce transport of air pollutants to neighboring air basins.

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. 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 one-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 with ozone 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).

PROPOSED AMENDMENTS

There are twelve amendments proposed to Rules 8-33 and 8-39. The purpose of these amendments is to reduce organic compound emissions, clarify applicability of the rules,

improve enforceability of the rules, and enhance the safety of the bulk terminal and bulk plant operations. The proposed amendments include:

- A reduction in the allowable emission limit; and a requirement to monitor vapor recovery system performance to ensure the vapor recovery system operates properly;
- A reduction of vapor leak standards and liquid leak standards in the rules, and a repair period to address leaks found by self inspection;
- A requirement that loading arm connectors and cargo tank vapor recovery connectors are compatible prior to gasoline loading, and meet the vapor and liquid leak standards;
- A requirement to install pressure sensors to monitor vapor collection piping backpressure, and an alarm or automatic shutdown if backpressure exceeds 18 inches water column;
- A requirement to install block or vapor check valves in each loading rack vapor collection header to minimize emissions when maintenance is required;
- A requirement that vapor hose connectors are stored out of the way of the truck driveway to prevent damage to the connectors, which can be a significant source of VOC leakage;
- A requirement to monitor vapor storage tank airspace emissions to ensure all leaks are discovered and repaired quickly;
- A requirement to install sample lines on the pressure and vacuum sides of inaccessible pressure/vacuum valves to provide ready access to check for leaks;
- A requirement to further control the release of organic compounds during operational, maintenance and repair operations.
- A requirement for an APCO-approved vapor recovery system monitoring, inspection, notification and reporting protocol.
- A requirement that plants and terminals apply for new or revised certifications of their equipment with CARB if substantive changes are made to their existing equipment.
- Revision to definitions and updates to source test requirements to be consistent with federal and state requirements.

Enhanced monitoring and compliance is central to most of the proposed amendments. The proposals for lower emission limits will require rigorous monitoring to prevent performance deterioration of the vapor processing system, and resulting increased emissions over an extended period of time. Other proposed amendments also improve the ability of terminal and plant operators and District staff to monitor compliance. These other amendments will indirectly reduce emissions, but such reductions are very difficult to quantify. Some of these expected episodic emissions reductions are not included the quantitative analysis of the overall total emissions reductions.

A. Reduction in Emission Limits

The proposed amendments modify the emission limit of CARB-certified gasoline bulk terminal vapor recovery systems from a limit of 0.08 pounds of non-methane organic compounds per 1,000 gallons of product loaded to a limit of 0.04 pounds of non-methane

organic compounds per 1,000 gallons of product loaded. While this appears to reduce emissions by half, all terminals already meet these more stringent standards in normal operation.

Currently, eight of the fourteen gasoline bulk terminals in the San Francisco Bay Area have District permit conditions that impose vapor recovery system emission limits of 0.02 to 0.04 pounds of non-methane organic compounds per 1,000 gallons of product loaded based on Best Available Control Technology (BACT) considerations. The remaining five active bulk terminals (one bulk terminal is currently out of service) have permit conditions that limit organic compound emissions to the Regulation 8, Rule 33 limit of 0.08 pounds of organic compounds per 1,000 gallons of gasoline loaded. The proposed amendments lower the organic compound emission limit to assure that all terminals maintain their vapor recovery equipment so that it continues to work efficiently and keeps emissions to a minimum.

Source tests conducted at twelve of the terminals demonstrate that the facilities already meet or exceed the proposed emission limit. The thirteenth terminal is not currently loading gasoline, but historical source tests indicate it can also meet the 0.04 lbs. /1000 gallons loaded. The fourteenth terminal is not currently in use.

Seven terminals have emission limits set by permit conditions that are at or below 0.04 lbs./1000 gal. The lower emission limit is estimated to reduce VOC emissions by approximately 0.06 tpd of organic compounds. This estimate is based on the recognition that while the five remaining terminals are currently capable of achieving 0.04 lbs./1000 gal. when operating effectively, they can occasionally have equipment or instrumentation problems that degrade their performance. Enhanced monitoring, combined with the more restrictive limit of 0.04 lbs./1000 gal. will require these five terminals to maintain their vapor recovery systems at the higher level of performance effectiveness. The District anticipates that terminals do not need to expend any capital or install additional equipment in order to achieve these emissions standards. However they may have to review maintenance procedures to ensure on-going compliance.

The proposed amendments require that an annual source test be conducted on each vapor processing unit at bulk terminals in accordance with the District's Source Test Method 34 (ST-34), CARB test procedures, or U.S. Environmental Protection Agency's (EPA) Reference Method 25. Similarly, the District is proposing a biennial source test at bulk plants.

In addition, the proposed amendments also require each gasoline bulk terminals to monitor their vapor processing units' performance. This monitoring can be performed by installing a hydrocarbon analyzer on the exhaust stream to monitor organic compound concentrations, or by alternative parametric monitoring of the vapor processing units. This monitoring is proposed to ensure performance is sustained at the high efficiency required to meet the VOC standards. The advantage of monitoring the hydrocarbon levels at the outlet of the abatement device is that it is a direct measurement of emissions, and can provide early warning if any aspect of the abatement begins to malfunction.

Hydrocarbon concentration measurement, however, does not replace a source test as the official determination of compliance. It is a tool to help a facility hold itself accountable for the abatement efficiency of its vapor processing system, avoid the risk of exceeding the District's emissions standard, and keep hydrocarbon emissions sustained at the desired low levels.

The proposed amendments also provide an option to develop an alternate parametric monitoring approach that would meet the requirements of 40 CFR, Part 63, Subpart BBBBBB. This alternate parametric monitoring of the vapor processing units will most likely cost less, but may require more intensive operational effort depending on the process control and management information systems available at the bulk terminal.

B. Reduction of Vapor and Liquid Leak Standards

The leakage standards for cargo tanks are set by CARB, in its CP-204, *Certification Procedure for Vapor Recovery Systems of Cargo Tanks.* Cargo tanks are required to be "vapor tight" and meet liquid leak requirements. These standards have been incorporated into Regs. 8-33 and 8-39 by reference. In summary, these standards measures the pressure decay of a cargo tank pressurized to 18 inches of water pressure, and also require that cargo tank equipment meet both vapor and liquid leak standards. If the cargo tank is "vapor tight," the pressure will not decay significantly, and the cargo tank will have no measurable leaks. CARB certifies cargo tanks to be vapor tight. Regs. 8-33 and 8-39 require use of CARB certified cargo tanks.

Liquid and vapor leak requirements at bulk terminals and bulk plants are set by two District regulations. Regulation 8, Rule 18, *Equipment Leaks* applies to the typical pumps, piping and process vessels found at bulk terminals and bulk plants and establishes a vapor leak standard of 100 – 500 ppm, depending on the type of equipment and a liquid leak standard of 3 drops per minute. Regs. 8-33 and 8-39 set specific leak standards for the unique equipment found at bulk terminals and bulk plants. This unique equipment includes the pressure/vacuum (P/V) valves that serve as safety pressure devices for vapor recovery systems; the connectors (couplings) used on the hoses from the bulk terminal or bulk plant loading line to the cargo tanks; and the vapor recovery hoses from the cargo tanks back to the vapor recovery system at the terminal, or back to the tank using the vapor balance process at the bulk plant.

Currently, the vapor leak standard in Regs. 8-33 and 8-39 for P/V valves is consistent with the standard described in CARB CP-202, *Certification Procedure for Vapor Recovery Systems of Bulk Plants* and CARB CP-203, *Certification Procedure for Vapor Recovery Systems of Bulk Terminals.* Pursuant to the procedures outlined in CARB TP-202.1, *Determination of Emission Factor of Vapor Recovery Systems of Terminals* and CARB TP-203.1, *Determination of Emission Factor of Vapor Recovery Systems of Terminals*, any leaks from the pressure side of the P/V valve are captured by enclosing the P/V valve discharge with a plastic bag, and measuring the leak rate. However, the vacuum side of the P/V valve cannot be enclosed with a plastic bag without compromising the safety of the vacuum break device. Therefore, any leakage from the vacuum side of the P/V valve is measured with a hydrocarbon analyzer. CARB currently

defines "vapor tight" as leakage less than 100% of Lower Explosive Limit (LEL) hydrocarbon concentration by. 100% of LEL equates to 51,000 ppm (as methane in air) when measured at the inlet to the vacuum side of the P/V valve.

Currently, the District's vapor leak standard in Regs. 8-33 and 8-39 for connectors is also consistent with the standard described in CARB CP-202, *Certification Procedure for Vapor Recovery Systems of Bulk Plants* and CARB CP-203, *Certification Procedure for Vapor Recovery Systems of Bulk Terminals.* Pursuant to CARB TP-204.3, *Determination of Leaks*, leakage is measured with a hydrocarbon analyzer. The standard is 100% of LEL, when measured 1 inch from the cargo tank half of the connector, and when at the interface of the potential leak from the bulk terminal or bulk plant half of the connector. Currently, Regs. 8-33 and 8-39 are consistent with these leak standards.

EPA has also independently set standards for vapor leaks. EPA had established the vapor leak standard at 10,000 ppm (as methane) for new gasoline bulk terminals (40 CFR 60 Subpart XX), and at 500 ppm (as methane) for gasoline bulk terminals subject to EPA's Maximum Achievable Control Technology (MACT) standards (40 CFR 60 Subpart R). Other air districts have updated their vapor leak limits to 10,000 ppm to reflect EPA's standards of performance. EPA's most recent (January 2008) requirements set in 40 CFR 63 Subpart BBBBBB establish the vapor leak standard at 500 ppm. Many, if not all of the bulk terminals and plants in the District are subject to EPA's vapor leak standard during source tests, which the District may incorporate and enforce through facility permit conditions. Staff received guidance from CARB that the District has the authority to set more stringent vapor leak standards at terminals and bulk plants in the Bay Area. The proposed amendments reduce the vapor leak limit for loading hose connectors, vapor recovery hose connectors, and pressure/vacuum valve leaks to 3000 ppm (as methane), which is equal to 6% of lower explosive limit. This limit is consistent with the most stringent limits currently in place in the state. Source test experience and inspection experience find that terminals and bulk plants are currently capable of meeting this more restrictive vapor leak limit provided proper maintenance procedures are in place. The amendments propose an effective date of July 1, 2009 for this lower vapor leak limit. The vapor leak standards for the cargo tank connectors to both the liquid loading arm and vapor recovery line will continue to be 100% of LEL.

In addition to imposing vapor leak standards, CARB, and Regs. 8-33 and 8-39 require that all equipment associated with gasoline cargo tank delivery and loading operations be free of liquid leaks. Currently, liquid "leak free" equipment is defined in Regs. 8-33 and 8-39 as equipment that leaks less than four drops of liquid gasoline per minute, not including leaks that occur during transfer fitting and loading arm disconnects. The proposed amendments will make these rules consistent with CARB's liquid leak standard. The CARB liquid leak standard is no more than three drops per minute. With the advent of improved self-sealing valves at the end of cargo and vapor recovery hoses based upon field observations of loading practices, the proposed standard is being achieved today, provided good maintenance practices are employed. The proposed amendments also require that terminal owners inspect loading arm connectors and vapor recovery hose connectors for leaks daily using sight, sound and smell; and inspect them

for leaks with a hydrocarbon analyzer weekly. All inspection records must be kept on file for review by District inspectors.

CARB, and Regs. 8-33 and 8-39 also have a liquid leak standard for liquid leaks that may occur when the liquid fill hose connectors or the vapor recovery hose connectors are disconnected from each other. All three rules stipulate that no more than 10 milliliters of product may be released per disconnect, averaged over three consecutive disconnects. Staff proposes to retain the existing standard for disconnect leaks.

The amendments described above are being proposed to make District standards consistent with current capabilities of equipment at gasoline bulk terminals, and consistent with the most stringent standards already in place in the state. Existing P/V valves and connectors at terminals and plants have been observed to meet the proposed leak standards. The District does not anticipate that gasoline bulk terminals and plants will require any new equipment or retrofits, so will not incur additional capital costs to comply with the proposed lower liquid leak standard. Additional maintenance may be required. If facility personnel discover a leak, a repair period of 8 hours for connectors (or 72 hours for P/V valves) is proposed to provide reasonable time to repair, or remove from service, the affected portion of the loading arm or vapor recovery system until the cause of the leak has been determined, repairs have been completed, and the equipment has been re-inspected immediately on its return to service to confirm it is leak free.

C. Compatibility of All Product Loading and Vapor Recovery Connections

The proposed amendments prohibit loading gasoline into a gasoline cargo tank unless the cargo tank's piping connectors are compatible with the gasoline bulk terminals' and plants' loading arms and vapor recovery connectors, and meet the vapor and liquid leak requirements. Incompatible piping connectors allow excessive liquid and vapor leaks. Because most tank truck carriers load gasoline at more than one bulk terminal or bulk plant, the proposed standard requires each bulk terminal and bulk plant to inform the cargo tank owner/operators of the compatible loading arm connectors and vapor recovery hose connectors required. In addition, the terminal and bulk plant operators must require their continued use to be allowed access to the terminal or bulk plant. Similarly, CARB already requires that the connectors of the cargo tank be compatible with the fittings on the fill pipes at the service stations and gasoline terminals or bulk plants that the cargo tank will service.

Based on District staff experience at terminals and plants, terminal or plant operators adjust the counter-weight system in their facilities' loading arms as needed so that the height of their loading arms meet connectors situated on high profile cargo tanks. Terminals or plants may also have available adapters that fit a variety of loading connectors as a precaution.

Improved connections between loading arms, vapor recovery hoses and cargo tanks can reduce organic emissions. However, such emission reductions are difficult to quantify accurately since the District does not have sufficient data to determine the frequency of

cargo tank loadings using incompatible equipment. Reduced emissions are estimated at 100 lbs of VOC for each loading rack.

D. Installation of Pressure Monitors on Vapor Lines

The proposed amendments will assure that gasoline bulk terminals and bulk plants maintain proper pressures in the vapor recovery system piping at the loading racks. The proposed amendments require that gasoline bulk terminals and bulk plants install pressure monitoring systems on all loading racks. As described above, a cargo tank operator loads the cargo tank from the bottom. As the product fills the cargo tank, residual or collected vapors in the cargo tank enter the vapor recovery hose and piping and ultimately these vapors are processed through the vapor processing unit (VPU). EPA, CARB, and the current rules 8-33 and 8-39 all require the pressure in vapor recovery systems to not exceed a set pressure of 18 inches of water column, as measured at the vapor cargo hose/cargo tank interface. When 18 inches of water pressure is exceeded at the vapor cargo hose/cargo tank interface, the pressure/vacuum (P/V) valve located on the dome hatch on top of the cargo tank is typically experiencing pressures above 20 inches of water column. At these pressures, a P/V valve on the cargo tank may open and release all or part of the vapors contained in the headspace of the cargo tank to the atmosphere.

Pressure monitors and/or alarms will provide early warning if the backpressure on the vapor recovery system increases. Occasionally, the vapor collection system piping will have a restriction or blockage, which causes a build-up of pressure in the cargo tank headspace. When a restriction or blockage does occur, subsequent cargo tanks loading at the same rack can experience the same backpressure problem until the problem is corrected. That pressure build-up can release vapors to the atmosphere, as well as cause a potentially flammable situation. Backpressure monitoring and/or alarms allow the operator sufficient time to prevent releases, as well as prevent a potentially hazardous situation.

Backpressure monitors can be installed in terminal piping as part of the vapor recovery system so they are visible to the cargo tank drivers and operators during loading events. The monitors will detect and signal when excessive pressure has developed in cargo tanks. The District estimates that up to 40 – 50 lbs of gasoline vapors per cargo tank may be released if a cargo tank's P/V valve set pressure is exceeded during loading at a terminal.

The proposal requires that bulk terminals install either an alarm system or an automatic shutoff system on their loading racks to notify operators if the vapor recovery piping back pressure is being exceeded during loading operations. An automatic shutoff system would stop a gasoline loading operation as soon as the back pressure in the vapor return hose exceeds 18 inches.

As an alternate, an alarm system would notify the operator as soon as the backpressure in the vapor hose exceeds 16 inches of water. If the backpressure in the vapor hose continues to increase to 18 inches of water, the alarm would again sound, and the

operator would be required to complete the load, then shut down that loading arm and the affected portion of vapor return system until the operator determines the cause of the pressure exceedance and completes repairs. In addition, operators will be required to notify the APCO within 24 hours, and document the time, date, pressure alarm status, responses, results of the investigations, and corrective actions taken each time the pressure exceeds 18 inches water column.

Bulk plants do not need to install an automatic shut-off or alarm system for their vapor recovery systems. Instead, the amendments propose to require the installation of a pressure gauge. The pressure gauge would be mounted on the end of the fixed piping of the vapor riser closest to the vapor hose connector. The gauge would indicate pressure levels in the hose. The operator must maintain the vapor recovery system pressure below the CARB-certified set pressure of the P/V valve(s) and the pressure gauge will allow him to readily discern this. If the set pressure is exceeded, the operator must immediately cease the loading operation. The District estimates that up to 40 - 50 lbs of gasoline vapors per cargo tank may be released from a single open P/V valve on a cargo tank loaded to capacity at a bulk plant.

E. Block Valves or Vapor Check Valves in Vapor Recovery Piping Systems

The District proposes a new requirement to install a block valve or a vapor check valve at the end of the vapor recovery piping at each loading rack location. These valves should be located as close as is practical to the vapor recovery hose.

When vapor recovery hose or vapor recovery connectors require maintenance, the current practice is to take that loading rack out of service, and isolate the vapor recovery hose and connector for maintenance. However, in many instances, there may be only one block valve or vapor check valve in the vapor recovery system piping, located at the far end of the loading rack. When the vapor recovery hose or connector is opened for repair, the gasoline vapors in the hose and any associated piping up to the vapor check valve are released to the air. Installation of additional block valve or vapor check valve at the end of each vapor recovery system piping near the vapor recovery hose will minimize the gasoline vapor that is emitted during this maintenance activity.

F. Hang the Vapor Recovery Hose When Not In Use

A new requirement is proposed to provide a hanger for each vapor recovery hose. When the vapor recovery hose is not in use, it should be hung up and out of the truck driveway, so that the connector does not get driven over and damaged. Connectors that have been damaged by trucks have been a source of excess emissions, and extra maintenance is required to replace the damaged connectors. Reduction in emissions from this simple approach is difficult to quantify, but estimated at 0.5 tons per year.

G. Monitor Hydrocarbon In The Airspace Of Vapor Storage Tanks

Four of the gasoline bulk terminals in the Bay Area have vapor recovery systems that include vapor storage tanks for temporary storage of vapors produced during gasoline loading operations. The storage tanks are cylindrical steel shells that contain a flexible

diaphragm or bladder, which expands upwards as vapors enter. To handle large surges in recovered vapors from busy loading periods, vapors are temporarily stored in these tanks until they can be processed when loading decreases. Storage tanks also have the added benefit of allowing the VPU to maintain a steady state operation.

The flexible diaphragm inside the vapor storage tank can develop leaks and degrade to an extent that gasoline vapors may be leaked into airspace above the diaphragm, and ultimately into the atmosphere. A diaphragm typically lasts from seven to 11 years. Currently, organic compound emissions in/from the airspace above the diaphragm are limited to a concentration of 3,000 parts per million (ppm) expressed as methane or 6.8 kilograms (15 pounds) per day. The amendments propose to retain the allowable concentration standard of 3,000 ppm (expressed as methane).

The proposed amendments require weekly monitoring of the vapor storage tank airspace when the vapor storage tank is in service, and gasoline loading is in progress. A portable hydrocarbon analyzer can be used to monitor the hydrocarbon concentration, and verify that total organic compound concentrations in the airspaces remain below 3,000 ppm. Weekly monitoring will allow the operator to detect any degradation or cracks developing in the diaphragms, so the vapor storage tank may be taken out of service for repair immediately, preventing excessive hydrocarbon leakage over an extended period of time. This proposed amendment only affects gasoline bulk terminals that operate vapor storage tanks as part of their vapor recovery systems.

H. Install Sample Lines on Pressure / Vacuum Valves

District staff tests P/V valves located on top of the vapor recovery systems and vapor storage tanks to confirm that the valves comply with the vapor tight standard. Currently, staff must climb as much as 20 feet above grade to reach the top of the vapor recovery systems and vapor storage tanks to conduct these tests. The proposed amendment requires owners and operators of gasoline bulk terminals to install permanent sampling lines to their P/V valves with an outlet near ground level to provide a more accessible sampling location and enable District and facility staff to conduct the sampling safely and more frequently.

Sampling lines to inaccessible P/V valves would need to be at least 0.25 inch inside diameter and situated one (1.0) centimeter from the pressure outlet and vacuum inlet of the P/V valve. It is most effective to install these sample lines on the downwind side of the pressure and vacuum ports of the P/V valve. The sampling line will then be brought down to less than five (5) feet above grade and equipped with a valve. A portable hydrocarbon analyzer can then be used at the end of the valve to determine compliance with the leak concentration standards in the rules.

A majority of terminals have already installed sampling lines at most locations where their P/V valves are inaccessible. This amendment will ensure conformity in the installation of the sampling lines. Emission reductions from this requirement are based on catching P/V valve leaks earlier, so they can be repaired more quickly. VOC emission

reductions from better P/V valve monitoring are estimated to total 0.5 tons per year for the terminals and bulk plants in the Bay Area.

I. Minimize Release of Vapors During Maintenance and Repairs

The amendments propose to enhance the practices used to remove gasoline liquid and vapors from piping systems and cargo hoses in preparation for maintenance and repair work in order to reduce potential fugitive gasoline vapor emissions. Some terminal operators pour excess gasoline from their loading arms and cargo hoses into their oily water drainage system when they have to clean up the hoses and connectors for routine maintenance. Staff estimates that 17 – 22 gallons of gasoline are spilled from a loading arm onto the ground and into drain basins prior to washing the gasoline into the terminal's underground slop tanks. One third may evaporate prior to washing the remainder into the oil – water separator. The resultant emissions would be more than 30 lbs. This amendment would prohibit this practice and require that bulk terminal and bulk plant operators dispose of gasoline into some sort of enclosed system that is connected to the vapor recovery system prior to maintenance or operational procedures that require draining the liquid or vapor hoses. This may be a portable maintenance container that is equipped with a loading hose and vapor recovery hose connectors, or an existing slop tank.

The proposed amendments specifically prohibit the draining or storage of gasoline in an open container or the handling of gasoline in any manner (e.g., spillage, purging) that would allow liquid gasoline or gasoline vapors to enter the atmosphere or to flow to a sewer or to contaminate the ground. Any residual liquid found in the hose due to condensation of the vapors must be disposed of either in a portable maintenance container or in a slop tank to the greatest extent practicable (not all liquid and vapor can be recovered using these methods, but each facility is expected to recover as much liquid and vapor as possible, and only drain liquid into an open container for disposal when no other reasonable method is available). Finally, the proposal requires that portable maintenance containers or slop tanks have a vapor tight covers, seals, lids that meet the leak requirements of Regulation 8, Rule 18. The hose connectors must meet the CARB vapor and liquid leak standards.

The annual emissions reductions from this proposal are difficult to quantify because the number of spills at bulk terminals is not documented. If, as described above, five gallons of gasoline evaporated during quarterly maintenance at each loading rack, organic compound emissions would total 500 lbs per year or more, depending on the size of the facility.

J. Emissions Monitoring, Inspection, Notification, and Reporting Protocol

EPA's most recent (January 2008) requirements for bulk terminals and bulk plants are set forth in 40 CFR Part 63, Subpart BBBBBB. These requirements apply to all gasoline bulk terminals and bulk plants that are not subject to EPA's Maximum Achievable Control Technology (MACT) requirements set forth in 40 CFR Part 63, Subpart R. Among many other requirements, Subpart BBBBBB requires a monthly leak inspection of all equipment in gasoline service using sight, sound and smell detection methods. The

proposed amendments include a requirement for an APCO approved monitoring, inspection, notification and reporting plan that will be helpful for both industry and District staff by requiring approval and implementation of practices that will satisfy the requirements of Subpart BBBBBB's monthly leak inspection and other requirements in Subparts BBBBBB, XX and R and 8-33, as applicable, while providing flexibility for industry to develop terminal-specific plans.

K. Require Updated CARB Certification

Pursuant to California Health and Safety Code Section 41954, owners and operators of California gasoline bulk terminals and plants must have their vapor recovery systems certified by CARB. The District currently requires that all bulk terminals' and bulk plants' vapor recovery systems comply with CARB standards and certification procedures at all times. These amendments propose to clarify when the District expects facilities to apply for recertification with CARB. The purpose of this requirement is to ensure that gasoline bulk terminal and plant owners and operators have their existing facilities recertified by CARB following any substantive modifications that cause an increase in throughput or capacity, or following installation of new equipment.

Owners and operators are required to notify CARB of any substantive modifications or additions to their terminal or plant under Title 17 of the California Code of Regulations. The recertification procedure ensures that any changes performed on the terminal or plants adhere to the existing regulations. A maximum throughput for terminals and plants is also established as part of the certification process based on the ability of existing control equipment to control vapor emissions generated. Re-certification of the plant or terminal is not required during routine maintenance that does not alter the throughput, modify the performance of the loading arm, or alter the original design of the terminal or plant. This is existing State law, although the amendment will clarify when the District expects facilities to apply for recertification and make it easier for District staff to enforce the provisions requiring valid certifications for individual terminals and plants. Consequently, this amendment has no anticipated emission reductions and does not require any additional capital expenditures by bulk terminals or plants.

L. Minor Editorial Changes

The definitions in Regulation 8-33 and Regulation 8-39 are proposed to be expanded or edited for clarification. Definitions for gasoline cargo tank, loading event, portable maintenance container, Reid vapor pressure, slop tank, vapor processing unit and vapor recovery system have also been added.

The District is proposing to amend the definition of gasoline to include aviation gasoline and additives that are delivered to a bulk terminal or plant via cargo tanks. Aviation fuels are currently not required to be distributed using a CARB certified vapor recovery system or cargo tank, however are required to comply with all the other standards (leak standards, etc.). The proposed amendments clarify the standards for aviation gasoline and additives.

M. Potential Emission Reductions

Table 2 summarizes the emission reductions from the proposed amendments.

TABLE 2

Emissions Reductions from Proposed Amendments

Proposed Amendment	**Estimated Emission Reductions:** Daily	**Estimated Emission Reductions:** Episodic
Emission factors	0.06 tons per day	
Vapor and Liquid leak standards	0.01 tons per day	
Compatibility of connectors		uncertain
Pressure monitors on vapor lines		0.021 tons per event (terminal) 0.018 tons per event (plant)
Block valves or Vapor check valves		0.01 tons per event
Hang Vapor hoses		0.5 tons per year
Monitor hydrocarbons in vapor storage tanks		0.004 tons per day (for 4 terminals)
Sample lines on P/V valves		0.5 tons per year
Spilled gasoline during repairs		0.015 tons per event
TOTAL	**0.07 tons per day***	**1.0 tons per year** **~0.02 tons per event***

* Episodic emissions (events) and daily emissions are not combined.

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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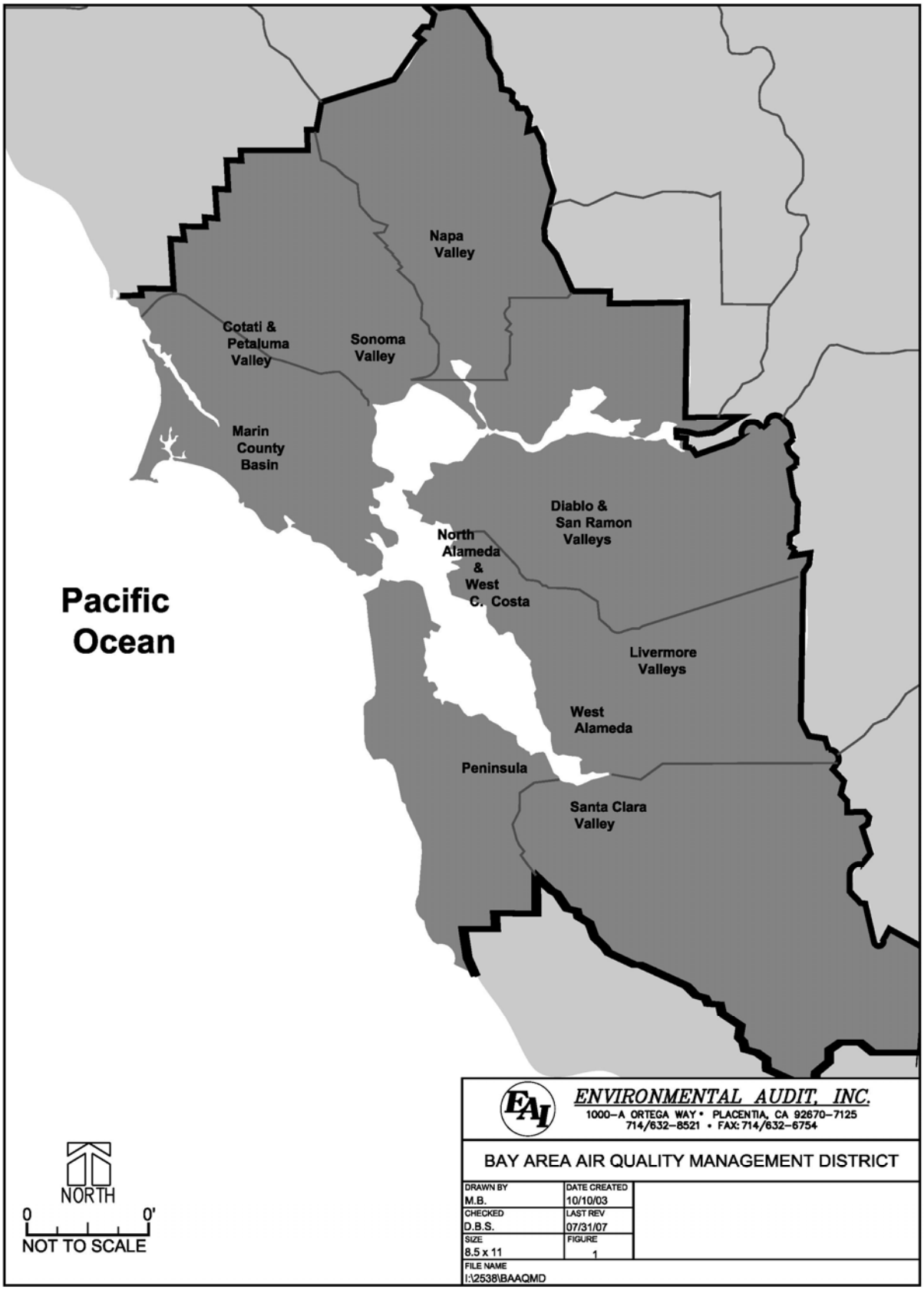
Napa Valley
Cotati & Petaluma Valley
Sonoma Valley
Marin County Basin
Diablo & San Ramon Valleys
North Alameda & West C. Costa
Pacific Ocean
Livermore Valleys
West Alameda
Peninsula
Santa Clara Valley
NORTH
0 0'
NOT TO SCALE
ENVIRONMENTAL AUDIT, INC.
1000-A ORTEGA WAY • PLACENTIA, CA 92670-7125
714/632-8521 • FAX: 714/632-6754
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
DRAWN BY M.B.
DATE CREATED 10/10/03
CHECKED D.B.S.
LAST REV 07/31/07
SIZE 8.5 x 11
FIGURE 1
FILE NAME I:\2538\BAAQMD

Chapter 3

Environmental Checklist

ENVIRONMENTAL CHECKLIST FORM

1. Project Title:	Bay Area Air Quality Management District (BAAQMD) Proposed Amendments to Regulation 8, Rules 33 & 39.
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:	Guy Gimlen, Air Quality Engineer 415/749-4734 or ggimlen@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 gasoline bulk terminals and gasoline bulk plants which are intermediate facilities that distribute gasoline, gasoline additives, and other fuels, and gasoline cargo tanks that deliver these products to service stations and local businesses.
7. Zoning	The rule amendments apply to gasoline bulk terminals, gasoline bulk plants, and gasoline cargo tanks 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 amendment is primarily focused on gasoline bulk terminals, gasoline bulk plants, and gasoline cargo tanks. These types of facilities and equipment are most often found in industrial and commercial applications. The proposed rule amendments 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 8-33 and Regulation 8-39 would further reduce VOC emissions from gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks 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 implemented, the proposed amendments would not require equipment that would be visible as the amendments would involve reduced emission limits, improved monitoring and procedural requirements, and additional provisions and equipment to prevent releases of fugitive emissions during processing and maintenance operations which would not require equipment that is visible to surrounding areas. The equipment affected by the proposed rule amendments would be located within industrial or commercial areas, which are not typically located in areas with scenic vistas. The proposed amendments to Regulation 8-33 and Regulation 8-39 are not expected to require 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. The proposed amendments to Regulation 8-33 and Regulation. 8-39 would also not require any new sources of light or glare, since all modifications would be made within existing terminal facilities.

Based upon these considerations, no significant adverse aesthetic impacts are expected from the implementation of the amendments to Regulation 8-33 and Regulation 8-39.

	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 facilities and equipment affected by the proposed rule amendments are primarily located in industrial or commercial areas throughout the Bay Area. Agricultural resources are generally not located in the vicinity of industrial 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 8-33 and Regulation 8-39 would further reduce VOC emissions from gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks 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 equipment and would not require construction activities outside of existing facilities. Therefore, the proposed amendments would not require the conversion of agricultural land for other uses.

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. 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 4.

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 5). The Air District is in attainment of the State and federal ambient air quality standards for CO, nitrogen oxides (NOx), and SO_2. The Air District is not considered to be in attainment with the State PM10 and PM2.5 standards.

The 2007 air quality data from the BAAQMD monitoring stations are presented in Table 4. 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 one (1) day in the District in 2007, while the state standard was exceeded on nine (9) 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 four (4) days in 2007 in the District, most frequently in the Eastern District (Livermore) (see Table 5).

All monitoring stations were in compliance with the federal PM10 standards. The California PM10 standards were exceeded on four (4) days in 2007, most frequently in San Jose. The Air District exceeded the federal PM2.5 standard on 14 days, most frequently in San Jose, in 2007 (see Table 5).

TABLE 3

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 $\mu g/m^3$, annarithmetic mean > 50 $\mu g/m^3$, 24-hr average>	50 $\mu g/m^3$, annual arithmetic mean > 150 $\mu g/m^3$, 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 $\mu g/m^3$, annual arithmetic mean>	15 $\mu g/m^3$, annual arithmetic mean> 35 $\mu g/m^3$, 24-hour average>	Decreased lung function from exposures and exacerbation of symptoms in sensitive patients with respiratory disease; elderly; children.
Sulfates	25 $\mu g/m^3$, 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 $\mu g/m^3$, 30-day avg. >=	1.5 $\mu g/m^3$, 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 4
Bay Area Air Pollution Summary - 2007

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	74	0	61	0	2	57	3.2	2.0	0	53	10	0	-	-	-	21.4	50	0	0	-	-	-	-	-
San Rafael	72	0	57	0	0	48	2.8	1.3	0	57	14	0	-	-	-	17.5	56	0	1	-	-	-	-	-
Santa Rosa	71	0	59	0	0	47	2.6	1.7	0	46	11	0	-	-	-	17.1	37	0	0	32.0	0	30.4	7.6	8.1
Vallejo	78	0	66	0	0	54	3.3	2.7	0	58	11	0	4	1.3	0	19.0	52	0	2	40.8	4	36.2	9.8	9.8
Coast/Central Bay																								
Richmond	-	-	-	-	-	-	-	-	-	-	-	-	7	1.6	0	-	-	-	-	-	-	-	-	-
San Francisco	60	0	49	0	0	45	2.5	1.6	0	69	16	0	6	1.5	0	21.9	70	0	2	45.2	5	29.3	8.7	9.3
San Pablo	74	0	51	0	0	47	2.4	1.2	0	52	12	0	5	1.6	0	20.6	57	0	2	-	-	-	-	-
Eastern District																								
Benicia	83	0	71	0	1	n/a	1.1	0.6	0	39	n/a	0	7	n/a	0	n/a	31	0	0	-	-	-	-	-
Bethel Island	93	0	78	0	4	73	1.1	0.8	0	48	8	0	5	1.5	0	18.8	49	0	0	-	-	-	-	-
Concord	105	1	81	0	4	73	2.2	1.4	0	49	11	0	5	1.7	0	16.8	52	0	2	46.2	7	34.0	8.4	8.9
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	9	2.0	0	-	-	-	-	-	-	-	-	-
Fairfield	89	0	67	0	0	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livermore	120	2	91	1	3	77	3.3	1.8	0	52	13	0	-	-	-	19.8	75	0	2	54.9	3	34.8	9.0	9.3
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	8	1.7	0	-	-	-	-	-	-	-	-	-
Pittsburg	100	1	74	0	2	70	2.8	1.5	0	51	10	0	7	2.2	0	19.4	59	0	4	-	-	-	-	-
South Central Bay																								
Fremont	79	0	68	0	0	58	2.5	1.6	0	58	14	0	-	-	-	19.6	61	0	1	51.2	2	30.4	8.7	9.4
Hayward	75	0	65	0	0	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	77	0	69	0	0	51	5.5	2.3	0	57	13	0	-	-	-	19.6	56	0	1	45.4	1	31.0	8.3	8.9
San Leandro	71	0	54	0	0	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara Valley																								
Gilroy	91	0	70	0	0	70	-	-	-	-	-	-	-	-	-	-	-	-	-	21.5	0	n/a	n/a	n/a
Los Gatos	84	0	65	0	0	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose Central	83	0	68	0	0	61	3.5	2.7	0	65	17	0	-	-	-	22.0	69	0	3	57.5	9	38.3	10.7	11.1
San Jose, Tully Rd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.6	78	0	3			-	-	-
San Martin	96	1	73	0	4	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunnyvale	77	0	68	0	0	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Days over Standard		**4**		**1**	**9**				**0**			**0**			**0**			**0**	**4**		**14**			

(ppm) = parts per million, (pphm) = parts per hundred million, (ppb) = parts per billion

TABLE 5

Bay Area Air Quality Summary
Days over standards

YEAR	OZONE			CARBON MONOXIDE				NO_2	SULFUR DIOXIDE		PM10		PM2.5
	1-Hr	8-Hr		1-Hr		8-Hr		1-Hr	24-Hr		24-Hr*		24-Hr**
	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Cal	Nat	Cal	Nat	Cal	Nat
1996	34	-	-	0	0	0	0	0	0	0	0	3	-
1997	8	-	-	0	0	0	0	0	0	0	0	4	-
1998	29	16	-	0	0	0	0	0	0	0	0	5	-
1999	2	9	-	0	0	0	0	0	0	0	0	12	-
2000	12	4	-	0	0	0	0	0	0	0	0	7	1
2001	15	7	-	0	0	0	0	0	0	0	0	10	5
2002	16	7	-	0	0	0	0	0	0	0	0	6	5
2003	19	7	-	0	0	0	0	0	0	0	0	6	0
2004	7	0	-	0	0	0	0	0	0	0	0	7	1
2005	9	1	-	0	0	0	0	0	0	0	0	6	0
2006	18	12	-	0	0	0	0	0	0	0	0	15	10
2007	4	1	9	0	0	0	0	0	0	0	0	4	14

* 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 6 (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 6

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 22-member Board of Directors composed of publicly-elected officials apportioned according to the population of the represented counties. 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 TACs and high exposures of sensitive populations to TACs 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 8-33 was adopted in November 1983, and amended in October 1987, and June 1994. Regulation 8-39 was adopted in October 1987, and amended in June 1994. The objectives of the proposed rule amendments are to implement Control Measure SS-7 from the Bay Area 2005 Ozone Strategy in order to help reduce VOC emissions from gasoline bulk terminals, gasoline bulk plants, and gasoline cargo tanks, and make Regulation 8-33 and Regulation 8-39 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 and f. Enhanced monitoring and compliance is central to most of the proposed amendments. The proposals for lower emission limits will require rigorous monitoring to prevent performance deterioration of the vapor processing system, and resulting increased emissions over an extended period of time. Other proposed amendments also improve the ability of terminal and plant operators and District staff to monitor compliance. The proposed amendments are not expected to require substantial changes or any major construction activities at the affected facilities, so that construction emissions are expected to be less than significant.

The emission reductions expected from the proposed amendments to both rules are summarized in Table 7.

TABLE 7

Emission Reductions from Proposed Amendments to Regulation 8-33 and Regulation 8-39

Proposed Amendment	**Estimated Emission Reductions:** Daily	**Estimated Emission Reductions:** Episodic
Emission factors	0.06 tons per day	
Vapor and Liquid leak standards	0.01 tons per day	
Compatibility of connectors		uncertain
Pressure monitors on vapor lines		0.021 tons per event (terminal) 0.018 tons per event (plant)
Block valves or Vapor check valves		0.01 tons per event
Hang Vapor hoses		0.5 tons per year
Monitor hydrocarbons in vapor storage tanks		0.004 tons per day (for 4 terminals)
Sample lines on P/V valves		0.5 tons per year
Spilled gasoline during repairs		0.015 tons per event
TOTAL	**0.07 tons per day***	**1.0 tons per year** **~0.02 tons per event***

* Episodic emissions (events) and daily emissions are not combined.

The proposed amendments are not expected to result in a violation of any air quality standard or contribute to an existing or projected air quality violation. The proposed rule amendments are expected to result in a decrease in VOC emissions (and ultimately ozone concentrations) over time by allowing the BAAQMD to

enforce lower allowable emission limits, thus providing an air quality benefit. Therefore, the proposed amendments would not diminish an existing air quality rule or future compliance requirements.

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 VOC emissions. Therefore, the cumulative air quality impacts of the proposed rule amendments are expected to be beneficial.

Proposed amendments to Regulation 8, Rule 33 and 39 will have very little impact on the terminal's vapor recovery systems or overall efficiency, so no significant net change in greenhouse gas emissions is anticipated. Carbon adsorption units found in 10 of the bulk terminals have the advantage of recycling gasoline vapors back to a refinery. Thermal oxidizers are found in two of the gasoline bulk terminals where it is not practical to recycle vapors back to a refinery. These thermal oxidizers do have a slight advantage in that they burn methane, a minor component in gasoline vapors. Carbon adsorption does not capture methane very effectively. Although methane has a greater global warming potential than carbon dioxide (21X), overall, carbon adsorption units generate less green house gas emissions than thermal oxidizers.

III d. VOC emissions can also contain toxic air contaminants. Reducing the allowable VOC emissions ultimately is expected to lead to a reduction in toxic air contaminants and reduced exposure to sensitive populations. Most facilities are expected to comply with the proposed amendments to Regulation 8-33 and Regulation 8-39 through upgrading existing equipment, installation of monitoring devices and improved operating procedures. These modifications and upgrades are expected to minimize exposure to sensitive receptors to substantial pollutant concentrations, so no significant impacts are expected.

III e. The proposed project is not expected to result in an increase in odors. The proposed amendments to Regulation 8-33 and Regulation 8-39 propose improved technology for reducing VOC emissions from gasoline bulk terminals, gasoline bulk plants, and gasoline cargo tanks. Affected facilities are expected to comply by upgrading existing equipment, installing enhanced monitoring devices, and adopting improved operating procedures. The modified and upgraded facilities will produce less VOCs, and with an overall air quality benefit, and a potential reduction in odor impacts. Therefore, no significantly adverse incremental odor impacts are expected due to the proposed rule amendments.

Based upon these considerations, no significant adverse air quality impacts are expected from the implementation of the proposed rule amendments. In fact, the proposed rule amendments are expected to provide beneficial air quality impacts by reducing VOC emissions and subsequent formation of ozone.

	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 or commercial areas throughout the Bay Area. The affected areas have been graded to develop various industrial 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 the requirements of 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 gasoline bulk terminals, gasoline bulk plants, and gasoline cargo tanks. The proposed amendments are not expected to require the construction of any major new equipment and would not require construction activities outside the boundaries of existing facilities. The existing facilities and equipment 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. Modification activities associated with the proposed amendments to Regulation 8-33 and Regulation 8-39 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments are primarily located in industrial or commercial areas throughout the Bay Area. These sites have already been graded to develop industrial 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks. The equipment affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial or commercial facilities. No major construction activities are expected to be required by the proposed amendments. The existing facilities 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 8-33 and Regulation 8-39. Therefore, no significant adverse impacts to cultural resources are expected due to the proposed amendments to Regulation 8-33 and Regulation 8-39.

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 industrial and commercial areas throughout the Bay Area.

The affected areas with gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial or commercial facilities. No major construction activities would be required as a result of adopting the proposed amendments to Regulation 8-33 and Regulation 8-39 and no new structures would be required. Rather, minor modifications to existing equipment may be required. New industrial 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 construction 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.

No significant impacts from seismic hazards are expected since no new development is required due to implementation of the proposed amendments to Regulation 8-33 and Regulation 8-39.

VII b. The gasoline bulk plants, gasoline bulk terminals and gasoline cargo tanks affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial or commercial facilities. No new construction activities would be required due to the adoption of Regulation 8-33 and Regulation 8-39. 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks that currently exist are located and operated within the confines of existing industrial or commercial facilities so no major construction activities are expected. Since the industrial 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. Major construction activities would not be required and 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 8-33 and Regulation 8-39.

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

The affected gasoline bulk terminals, gasoline bulk plants and gasoline cargo tank 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.

- **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 facilities 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 8-33 and Regulation 8-39 will lead to a reduction in VOC emissions from existing facilities. Most affected facilities are expected to comply with the proposed amendments to Regulation 8-33 and Regulation 8-39 by upgrading equipment, installing monitoring equipment and improving handling procedures. The proposed amendments would not change the amount or types of materials stored at the affected facilities. No new hazards or hazardous materials are associated with the proposed amendments. Therefore, no significant adverse hazard and hazardous material impacts are associated with the proposed amendments. In fact, the proposed amendments should reduce the potential for overpressure events during gasoline loading, reducing the potential for a vapor leak that could

create a flammable or explosive hazard, and reduce the frequency and scope of liquid spills by strengthening repair and maintenance procedures.

VII d. No impacts on hazardous material sites are anticipated from the proposed rule amendments that would typically apply to existing industrial 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. Gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks already exist, and are located and operated within the confines of industrial 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks. The existing equipment and operations are located within the confines industrial or commercial facilities. Once the proposed amendment is implemented, facilities would be expected to comply by upgrading existing equipment, installing monitoring equipment and implementing improved operating procedures. 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 8-33 and Regulation 8-39. Therefore, no significant adverse impacts on an airport 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 or commercial facilities. The gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks which already exist are located and operate 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. 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed amendments already exist and are located and operate within the confines of existing industrial or commercial facilities. The proposed amendments would not result in major construction activities outside the boundaries of the existing facilities. No increase in exposure to wildfires will occur due to the proposed amendments to Regulation 8-33 and Regulation 8-39.

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 and commercial facilities affected by the proposed rule amendments are located throughout the Bay Area. Affected areas are generally surrounded by other industrial 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 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 8-33 and Regulation 8-39.

VIII b. The gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments already exist and are primarily located and operated within the confines of existing industrial or commercial facilities. The proposed amendments to Regulation 8-33 and Regulation 8-39 are not expected to require additional water use. Upgrading of existing equipment, installing monitoring equipment or improving operating procedures do not require additional water use. 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 8-33 and Regulation 8-39.

VIII c - e. Industrial and commercial facilities are expected to comply with the proposed amendments to Regulation 8-33 and Regulation 8-39 by upgrading existing equipment, installing monitoring devices and improving operating procedures. All affected equipment is located and operated in industrial or commercial areas, where storm water drainage has been controlled and monitored, 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 equipment 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 8-33 and Regulation 8-39. 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 is expected due to the adoption of the proposed amendments to Regulation 8-33 and Regulation 8-39. 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 industrial 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments already exist and are located within the confines of existing industrial or commercial facilities. Industrial or commercial facilities are expected to comply with Regulation 8-33 and Regulation 8-39 by upgrading or installing new equipment, monitoring devices, and implementing new procedures. These changes are expected to be made within the confines of existing facilities. No construction activities outside of the confines of the existing facilities are expected to be required due to the adoption of the proposed amendments to Regulation 8-33 and Regulation 8-39, so no impacts on land use are expected.

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 industrial 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments already exist and are located within the confines of existing industrial and commercial facilities. Any new equipment would be installed in the same 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 or commercial areas throughout the Bay Area. A majority of the affected areas are surrounded by other industrial 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-b. The gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments already exist and are located within the confines of existing industrial and commercial facilities. The rule amendments impose limitations on the VOC emissions from equipment at these facilities. Compliance will be achieved by upgrading or installing new equipment designed to reduce VOC emissions in the Bay Area.

No major construction activities would be required due to the adoption of the proposed amendments to Regulation 8-33 and Regulation 8-39 so that no noise impacts are expected due to construction activities. Therefore, no adverse significant impacts to noise are expected due to the proposed project.

XI c-d. Owners/operators of facilities affected by the proposed rule amendments would be required to modify existing equipment or implement additional procedures designed to reduce VOC emissions. 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. No new major construction is expected as a result of the proposed amendments, so no noise impacts associated with the use of construction equipment and construction-related traffic is expected. Additionally, noise from the proposed project is not expected to produce noise in excess of current operations at each of the existing facilities. No increase in noise is expected due to operation of any new or modified equipment. The technologies that are expected to be used to comply with the proposed rule amendment (e.g., new piping and valves) are not expected to result in an increase in noise. 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 may be located at sites within an airport land use plan, or within two miles of a public airport, the 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 industrial 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. No major construction activities are expected due to the proposed amendments. The minor facility modifications that are required by the proposed amendments can be completed by the existing labor pool in the local Bay Area. Further, it is not expected that the minor facility modifications will require new employees at the affected facilities. 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 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 amendments is not expected to result in impacts to police or fire services. The proposed amendments may require minor modifications to affected facilities, such as installing monitoring equipment or improving operating procedures, but all modifications would occur within the

confines of the existing facilities. Gasoline bulk plants, terminals and dispensing facilities, are currently fenced and access limited through guarded gates for security purposes. The proposed amendments would not impact the existing security and, therefore, is not expected to impact police services or require additional police protection.

Similarly, the proposed amendments are not expected to require major changes to the affected facilities that would increase hazards or increase the need for fire protection services. The proposed amendments may require minor modifications to gasoline plants, terminals and dispensing facilities, but the modifications would not introduce new hazards to the facilities and all modifications would occur within the confines of the existing facilities. Therefore, the proposed amendments are is not expected to increase the need or demand for additional fire protection services 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. Since no major construction activities are expected as a result of implementing the proposed amendments to Regulation 8-33 and Regulation 8-39, no increase in traffic in the areas of each affected facility is expected. Additionally, the proposed amendments are not expected to cause any 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 increase as a result of the proposed amendments 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 be affected by the proposed amendments 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 amendments are not expected to significantly influence or affect air traffic patterns. Further, the upgrading of existing equipment,

addition of monitoring equipment, or improved operating procedures would not be expected to affect navigable air space. Thus, the proposed amendments 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 location 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 amendments are not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facilities. Since no major construction activities are expected due to the proposed amendments, no increase in construction traffic is expected. The proposed amendments are not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system are expected to occur. The proposed amendments do 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 amendments since no major construction activities are required. Further, each affected facility is expected to continue to maintain their existing emergency access gates and emergency access would not be impacted by the proposed rule amendments.

XV f. Since no major construction activities are required due to adoption of the proposed amendments, no facility will be required to provide parking for the construction workers. Further, no additional parking will be needed after adoption of the proposed amendments because the work force at each facility is not expected to increase. Therefore, the proposed rule amendments will not result in significant adverse impacts on parking.

XV g. Operational activities resulting from the proposed amendments are not expected to conflict with policies supporting alternative transportation since the proposed amendments do not involve or affect alternative transportation modes (e.g. bicycles or buses) because the operational activities related to the proposed project will occur solely in existing industrial and commercial 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 maintained within the local jurisdiction.

Discussion of Impacts

XVI a, b, d and e. The gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks affected by the proposed rule amendments already exist and are primarily located within the confines of existing industrial or commercial facilities. The proposed rule amendments are not expected to generate additional wastewater at the affected facilities. Additionally, no increase in water consumption would be associated with upgraded equipment, additional monitoring equipment, or improved operational procedures. Therefore, no impacts on wastewater treatment requirements or wastewater treatment facilities are expected due to implementation of the proposed amendments.

XVI c. The affected facilities are expected to comply with the proposed amendments by upgrading equipment, installing improved monitoring devices and implementing improved operational procedures. No major construction activities would be required as a result of adopting the proposed amendments at the 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 affect the ability of existing 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 upgrade existing equipment, install additional monitoring devices and improve operational procedures. 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 gasoline bulk terminals, gasoline bulk plants and gasoline cargo tanks, 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 VOC from affected facilities, 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

BAAQMD, 2006. Bay Area 2005 Ozone Strategy, January 4, 2006

BAAQMD, 2007. Toxic Air Contaminant Control Program Annual Report 2003 Volume I. August 2007.

BAAQMD, 2008. Bay Area Ozone Strategy Control Measure SS-7. BAAQMD Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Cargo Tanks; and Regulation 8, Rule 39: Gasoline Bulk Plants and Gasoline Cargo Tanks. Workshop Report. August 2008.

Metropolitan Transportation Commission (MTC), 2004. 2030 Transportation Plan Environmental Impact Report, State Clearinghouse (No. 2004022131).

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BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Torliatt and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: April 7, 2009

Re: Public Hearing to Consider Testimony on Proposed Amendments to District Regulation 3: Fees

RECOMMENDED ACTION:

No action is necessary at this time. A public hearing has been set for May 20, 2009 to consider adoption of the proposed fee amendments and approval of filing of a Notice of Exemption from the California Environmental Quality Act.

BACKGROUND

State law authorizes the District to assess fees to recover the reasonable costs of implementing and enforcing programs related to stationary sources of air pollution. The District has established, and regularly updates, its fee regulation (District Regulation 3: Fees) under these authorities.

Staff has prepared proposed amendments to District Regulation 3 for Fiscal Year Ending (FYE) 2010 that would increase revenue to enable the District to address increasing regulatory program activity costs, and continue to move toward more complete cost recovery. A recently updated Cost Recovery Study indicates that a significant cost recovery gap exists. For the FYE 2008, fee revenue covered 55 percent of direct and indirect program costs, leaving a gap that was filled by county revenue derived from property taxes. Reducing the cost recovery gap has become a particularly important part of the District's budgetary needs, as county revenue is projected to 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.

PROPOSED FEE AMENDMENTS

Staff's fee proposal includes percentage increases for most existing fees. The increase for an individual fee schedule would be 3, 6, 9, 12, or 15 percent based on the magnitude of the cost recovery gap for that schedule, with the exception of the fee schedule that covers refinery flares for which fees would be increased by 50 percent. Fee schedules without cost recovery gaps would not be increased. Fees that are administrative in nature would be increased by 6 percent.

Staff is also proposing a new Indirect Source Review (ISR) fee schedule. The new schedule would recover District costs associated with an ISR Rule that the District has

begun developing. The ISR Rule would address the adverse impacts of growth on local and regional air quality and on climate, and would apply to various development projects. The Rule would require that Air Quality Impact Assessment applications be submitted for District review and approval, and the proposed new fee schedule is structured to recover the costs of this review. The proposed fee schedule would also include an offsite emission reduction fee, but the details of this fee would be determined at a later date.

The attached draft Staff Report contains additional details regarding the proposed amendments to Regulation 3 including the complete text of the proposed changes prepared in strikethrough (deletion of existing text) and underline (new text) format. Responses to comments received on the staff proposal to date are also provided.

Under Health and Safety Code section 41512.5, the adoption or revision of fees for non-permitted sources requires two public hearings that are held at least 30 days apart from one another. The first public hearing, at which the Board will accept testimony on the fee proposal, has been set for April 15, 2009. The second public hearing, at which staff requests the Board consider adoption of the proposed fee amendments, has been set for May 20, 2009. The fee amendments, if adopted, would be made effective on July 1, 2009.

BUDGET CONSIDERATION/FINANCIAL IMPACTS

The proposed fee amendments would increase fee revenue in FYE 2010 by approximately $2.6 million from projected revenue levels in the FYE 2009 budget, representing an increase of 9.3 percent (6 percent on an inflation-adjusted basis). With these increased revenues, the District has prepared a balanced budget for FYE 2010 that does not require transfers from the Undesignated Reserve Fund.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian Bateman
Reviewed by: Jeffrey Mckay

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

STAFF REPORT

PROPOSED AMENDMENTS TO BAAQMD REGULATION 3: FEES

DRAFT

APRIL 3, 2009

Engineering Division
Bay Area Air Quality Management District

1. EXECUTIVE SUMMARY

District staff has prepared proposed amendments to District Regulation 3: Fees, for Fiscal Year Ending (FYE) 2010 (i.e., July 1, 2009 to June 30, 2010) that would increase revenue to enable the District to address increasing regulatory program activity costs, and continue to move toward more complete cost recovery. A recently updated Cost Recovery Study indicates that a significant cost recovery gap exists. For the most recently completed fiscal year (FYE 2008), fee revenue covered just 55 percent of direct and indirect program 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 (the District's primary source of general fund revenue used to fill the cost recovery gap) is projected to 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.

The proposed fee amendments would increase fee revenue in FYE 2010 by approximately $2.6 million from projected revenue levels in the FYE 2009 budget, representing an increase of 9.3 percent. For reference, the most recent annual increase in the Consumer Price Index (CPI) for the Bay Area (i.e., from Calendar Year 2007 to 2008) was 3.3 percent.

District staff is proposing amendments to existing fee schedules that are based on the magnitude of the cost recovery gap for each schedule. The fee schedule for refinery flares would be increased by 50 percent to provide more complete recovery of the District's costs of implementing and enforcing the District's rules for flare monitoring and control. Other fee schedules with large cost recovery gaps would be increased by 15 percent. Fee schedules with less significant cost recovery gaps would be increased by 12 percent, 9 percent, 6 percent, or 3 percent, based on the extent to which the schedule recovers the District's costs. Fee schedules with no cost recovery gaps would not be increased. Fees that are administrative in nature would be increased by 6 percent.

A new Indirect Source Review (ISR) fee schedule is proposed for the purpose of recovering District costs associated with an ISR Rule that the District intends to develop. The ISR Rule would address the adverse impacts of growth on local and regional air quality and climate change. The ISR Rule is expected to apply to various development projects and require that an application for an Air Quality Impact Assessment be submitted for District review and approval. The new ISR fee schedule would include an application filing fee and an application evaluation fee. The application evaluation fee would be based on the District's actual costs of evaluating the application, and the filing fee would be credited towards the evaluation fee. The new fee schedule would also include an offsite emission reduction fee, but the details of this fee would be determined at a later date.

The current $200 court reporter fee for hearings before the District's Hearing Board would be changed to a fee to recover the actual court reporter appearance and transcript costs. Finally, the provision to charge back fees, which currently applies to permit applicants who file after the effective date of a permit requirement, would be amended to also apply to persons subject to equipment registration who file after the effective date of a registration requirement.

The proposed fee amendments would increase annual permit renewal fees for most small businesses that require District permits by $15 to $80. One exception to this is for retail gasoline dispensing facilities, most of which would have permit renewal fee increases of $100 to $300. The annual permit renewal fees for the five Bay Area refineries, the District's highest fee payers, would increase by an average of $150,000.

2. BACKGROUND

State law authorizes the District to assess fees to generate revenue to recover the cost of District air pollution programs (i.e., the District's full direct and indirect expenditures for personnel, services and supplies, and capital outlay, related to implementing and enforcing air quality programs and regulations affecting 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 full costs of programs 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 [AB] 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 under these authorities (District Regulation 3: Fees). Currently, 46 percent of the District's general fund operating budget is derived from fees imposed in accordance with this regulation.

The District has analyzed whether these 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 revenues 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; 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, fund balances) had consistently 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 FYE 2000 as a step toward more complete cost recovery. In each of the next five years, the District adjusted fees only to account for inflation (with the exception of FYE 2005 for which the District also approved further

increases in Title V fees and a new processing fee for renewals of permits to operate).

In 2004, the District Board of Directors approved funding for 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; March 30, 2005*). This 2005 Cost Recovery Study indicated that a significant cost recovery gap continued to exist.

For the three years following the completion of the 2005 Cost Recovery Study (i.e., FYE 2006, FYE 2007, and FYE 2008), the District adopted fee amendments that increased overall projected fee revenue by an average of about 7 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.

For the current FYE 2009, the District adopted fee amendments using an approach that was similar to what was used for the three prior years, but that 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. Including the GHG fee schedule, the FYE 2009 fee amendments increased fee revenue by an estimated 13.9 percent from the prior fiscal year.

District staff has recently completed an updated analysis of cost recovery (*Bay Area Air Quality Management District 2009 Cost Recovery Study, March 2009*) using the methodology established by Stonefield Josephson, Inc. in their 2005 study. This 2009 Cost Recovery Study indicates that the cost recovery gap was $21 million in FYE 2008, with fee revenue covering 55 percent of program costs. For FYE 2008, cost recovery was impacted significantly by expenditures on deferred maintenance related to the District's facilities and information systems. In addition, the cost of prefunding Other Post Employment Benefits (OPEB) was addressed for the first time in FYE 2008.

For FYE 2010, District staff has developed proposed amendments to Regulation 3 using an approach that is similar to what was used over the past four years. On an overall basis, it is estimated that the amendments would increase fee revenue by $2.6 million in FYE 2010 from projected revenue levels in the current fiscal year budget, representing an increase of 9.3 percent. On an inflation-adjusted basis, the increase is 6 percent (the increase in the annual CPI for urban wage earners for the California Bay Area from calendar year 2007 to 2008, as reported by the California Department of Industrial Relations, Division on Labor Statistics and Research was 3.3 percent).

Reducing the cost recovery gap has become a particularly important part of the District's budgetary needs as county revenue derived from property taxes (the District's primary source of general fund revenue used to fill the cost recovery gap) is projected to decline by an estimated 10 percent 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. Nonetheless, staff has projected that fees will need to be increased by an average of 10 percent per year over the next several years in order to balance the budget in FYE 2012.

Projected fee revenue for FYE 2010 is provided in Table 1, based on District staff's proposed amendments to Regulation 3. 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 2010

Permit Fees	
New & Modified Permit Fees, Permit to Operate Renewal Fees, Title V Fees	$26,161,000
Greenhouse Gas Fees	$1,149,000
Other Fees	
AB 2588 Fees (includes State pass-through)	$639,000
Asbestos, and Soil Excavation, Notification Fees	$2,132,000
Registration Fees	$250,000
Hearing Board Fees	$36,000
Total	$30,367,000

3. PROPOSED FEE AMENDMENTS FOR FYE 2010

3.1 OVERVIEW OF PROPOSED AMENDMENTS

The District's fee proposal for FYE 2010 includes percentage increases for most existing fees. The proposed increase for an individual fee schedule is based on the magnitude of the cost recovery gap for that schedule. The proposed amendments for existing fee schedules are as follows:

1. The following fee schedule would be increased by 50 percent:

   Schedule G-5: Miscellaneous Sources

2. The following fee schedules would be increased by 15 percent:

   Schedule A: Hearing Board
   Schedule D: Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals
   Schedule E: Solvent Evaporating Sources
   Schedule K: Solid Waste Disposal Sites
   Schedule M: Major Stationary Source Fees
   Schedule S: Naturally Occurring Asbestos Operations

3. The following fee schedules would be increased by 12 percent:

   Schedule G-1: Miscellaneous Sources
   Schedule P: Major Facility Review Fees

4. The following fee schedules would be increased by 9 percent:

   Schedule F: Miscellaneous Sources
   Schedule G-2: Miscellaneous Sources
   Schedule H: Semiconductor and Related Operations
   Schedule I: Dry Cleaners
   Schedule L: Asbestos Operations

5. The following fee schedule would be increased by 6 percent:

   Schedule B: Combustion of Fuels

6. The following fee schedules would be increased by 3 percent:

   Schedule N: Toxic Inventory Fees
   Schedule Q: Excavation of Contaminated Soil and Removal of Underground Storage Tanks
   Schedule T: Greenhouse Gas Fees

7. The following fee schedules would not be increased:

   Schedule C: Stationary Containers for the Storage of Organic Liquids
   Schedule G-3: Miscellaneous Sources
   Schedule G-4: Miscellaneous Sources
   Schedule R: Equipment Registration Fees

In addition to these percentage increases in existing fee schedules, a new Fee Schedule U: Indirect Source Review Fees, is proposed for FYE 2010. Schedule U would be structured to recover the actual costs of District review of ISR applications. The fees specified under Schedule U would not apply until after the District adopts an ISR Rule.

Staff is also proposing to increase the following administrative fees (that are not associated with fee schedules) by 6 percent:

Section 3-302:	New and modified source filing fee
Section 3-309:	Duplicate permit fee
Section 3-311:	Banking filing fee and withdrawal fee
Section 3-312:	Regulation 2, Rule 9 Alternative Compliance Plan fee
Section 3-327:	Permit to Operate renewal processing fee
Section 3-329:	Fee for Risk Screening (base fee for each application specified in the applicable fee schedule)

In addition to these percentage increases in existing fee schedules and administrative fees, staff is proposing the following miscellaneous amendments: (1) the current $200 court reporter fee for hearings before the District's Hearing Board would be changed to a fee to recover actual court reporter appearance and transcript costs, and (2) the provision to charge back fees, which currently applies to permit applicants who file after the effective date of a permit requirement, would be amended to also apply to persons subject to equipment registration who file after the effective date of a registration requirement.

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 3-101: Description

The term "Indirect Source Review" has been added to this section because provisions for assessing fees for ISR are being established.

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

The proposed amendment for Section 3-302 is a 6 percent increase in the filing fee for permit applications (rounded to the nearest whole dollar), from $318 to $337.

- Section 3-303: Back Fees

The existing back fee provision In Section 3-303 applies only to equipment subject to permit requirements. If a permit application is submitted after the date that a permit is required for a particular source, this provision allows the District to collect fees prorated back to the effective date of the permit requirement (up to a limit of five years). The District has recently established equipment registration requirements for various smaller sources of air pollution. The proposed amendments to Section 3-303 would extend the back fee provision to also apply to equipment registrations. It should be noted that persons that fail to register sources with the District in a timely manner are subject to a

late fee of 10 percent under Section 3-405.4, and may also be subject to civil penalties.

- Section 3-309: Duplicate Permit

The proposed amendment for Section 3-309 is a 6 percent increase in the fee for a duplicate Permit to Operate (rounded to the nearest whole dollar), from $65 to $69 per permit.

- Section 3-311: Banking

The proposed amendment for Section 3-311 is a 6 percent increase in the filing fee for banking applications (rounded to the nearest whole dollar), from $318 to $337.

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

No change in regulatory language is proposed for Section 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 increase along with any increase in a facility's Permit to Operate renewal fees for sources in Schedules B, D, E, F, G-1, G-2, H, K, and I.

The proposed amendment for Section 3-312.2 is a 6 percent increase in the annual fee (rounded to the nearest whole dollar) for a facility that elects to use an Alternative Compliance Plan (ACP) contained in Regulation 2, Rule 9: Interchangeable Emission Reduction Credits. The fee for each source included in the ACP would be increased from $802 to $850, and the maximum fee would be increased from to $8,027 to $8,509.

- Section 3-320: Toxic Inventory Fees

The maximum toxic inventory fee for a small business specified in Section 3-320.1 would be increased by 6 percent (rounded to the nearest whole dollar) from $7,306 to $7,744.

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

The processing fees for renewal of Permits to Operate specified in Sections 3-327.1 through 3-327.6 would be increased by 6 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 6 percent from $318 to $337. The portion of the risk screening fee that is

based on the type of source involved would be increased by 6 percent for sources covered by Schedule B; by 9 percent for sources covered by Schedules F, G-2, H and I; by 12 percent for sources covered by Schedule G-1; by 15 percent for sources covered by Schedules D, E, and K; and by 50 percent for sources covered by Schedule G-5. There would be no increase (except for the increase in the base fee) for sources covered by Schedules C, G-3, and G-4.

- Section 3-335: Indirect Source Review Fees

A new Section 3-335 has been added to indicate that applicants who 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 the new Schedule U: Indirect Source Review Fees. The District intends on establishing in an upcoming rulemaking the requirement to file an application for an Air Quality Impact Assessment for various development projects that are indirect sources of air pollution.

- Fee Schedules

The fees contained in each existing fee schedule in Regulation 3 would be increased by either 3 percent, 6 percent, 9 percent, 12 percent, 15 percent, or 50 percent (rounded to the nearest whole dollar, in most cases) as summarized in Section 3.1 of this report, with the exception of the following fee schedules, which would have no increase in fees: Schedule C: Stationary Containers for the Storage of Organic Liquids, Schedule G3: Miscellaneous Sources, Schedule G4: Miscellaneous Sources, and Schedule R: Equipment Registration Fees.

With the exceptions noted below, three-year average cost recovery figures (covering the period July 1, 2005 to June 30, 2008) were used to establish the percentage increase for each existing fee schedule based on the following criteria:

Table 2. Criteria for Determination of Fee Increases Based on Cost Recovery Data

Fee Revenue as a Percentage of Costs	Fee Increase
40 percent or less	15 percent
41 to 55 percent	12 percent
56 to 70 percent	9 percent
71 to 85 percent	6 percent
86 to 100 percent	3 percent
Greater than 100 percent	None

Schedule A: Hearing Board Fees

The $200 Court Reporter fee in Section 18 of Schedule A would be changed to a fee that represents the actual Appearance and Transcript costs incurred for the Hearing Board Docket. This approach is considered more appropriate than a flat fee, and is currently used in Section 18 for Court Reporter fees for hearings that are solely dedicated to a single Docket in a given day. Court reporters currently require an Appearance Fee of about $150. If transcripts are produced, an additional charge of about $8 per page is incurred. A typical hearing produces about 50 pages of transcript, resulting in a Transcript Cost of about $400. Therefore, the existing $200 fee covers just over one-third of the typical cost of a court reporter's services.

It is important to note that the Hearing Board may excuse payment of the Court Reporter fee based on a finding of unreasonable hardship.

Schedule G-3: Miscellaneous Sources

The fee increase for Schedule G-3 was based on FYE 2008 revenue and activity data, rather than a three-year average. This was done because prior to FYE 2008, refinery flares (now in Schedule G-5) were included in Schedule G-3. The FYE 2008 activity data for Schedule G-3 is therefore most representative of the sources that are currently covered by that schedule.

Schedule G-5: Miscellaneous Sources

The fee increase for Schedule G-5 was based on FYE 2008 revenue and activity data, rather than a three-year average. This was done because District staff began specifically tracking activity data for Schedule G-5 in FYE 2008 after that schedule was initially adopted.

A 15 percent increase was initially proposed for Schedule G-5, but this proposal was revised to a 50 percent increase on March 24, 2009. The 50 percent increase is justified because existing fees collected under Schedule G-5 covers only a small fraction of the District's costs of regulating these sources (for FYE 2008, fee revenue from Schedule G-5 covered less than 30 percent of program activity costs). The revision was based in part on suggestions that District staff received from the Board of Directors' Budget and Finance Committee.

Schedule G-5 covers refinery flares that are subject to District Rule 12-11: Flare Monitoring at Petroleum Refineries, and Rule 12-12: Flares at Petroleum Refineries. District staff resources associated with refinery flares have increased sharply in recent years due to the adoption of Rules 12-11 and 12-12. Rule 12-11, adopted June 4, 2003, requires each refinery to submit a detailed monthly monitoring report to the District for each subject flare, and flare emissions data are posted on the District website. In addition, flow verification reports are required to be submitted for review every six months.

Rule 12-12, adopted July 20, 2005, specifies that refinery flaring is prohibited unless it is consistent with an approved Flare Minimization Plan (FMP), and all commitments due under that plan have been met. The initial FMPs were required to be submitted to the District by August 1, 2006. FMPs updates must be submitted on an annual basis thereafter. Prior to installing or modifying equipment that may contribute to flaring, FMPs must also be updated to address the new or modified equipment. Finally, Rule 12-12 requires the refineries to submit reports to the District that provide detailed information regarding the cause of individual flaring events. The FMP process is considered to be one in which new opportunities to reduce flaring emissions are sought on an ongoing basis based on improvements in the design and operation of refinery process equipment.

For the annual period July 1, 2007 to June 30, 2008, the District's direct costs associated with refinery flares were $867,500. These costs may decrease to some extent over the next several years if flaring events associated with the startup and shutdown of refinery process units is reduced.

Permit fee revenue collected under Schedule G-5 for the last fiscal year was $305,000. Increasing the fees for refinery flares by 50 percent would increase overall annual permit fees for these sources to about $442,000. This would more fully recover the District's ongoing costs associated with implementation and enforcement of Rules 12-11 and 12-12. The annual permit renewal fee for each flare would be $18,635.

With the proposed change to Schedule G-5, and the other proposed fee amendments, it is estimated that the annual permit renewal fees for the five Bay Area refineries would increase by 9.4 percent from the current fiscal year, with the largest increase for an individual facility being 11 percent.

Schedule I: Dry Cleaners

Fee revenue from Schedule I is less than 40 percent of program costs, which could justify a higher percentage fee increase than the 9 percent increase proposed. Permit fee revenue from dry cleaners has declined significantly in recent years as new Perc dry cleaners are prohibited, and non-Perc dry cleaners have qualified for permit exemptions. This revenue shortfall has been addressed by recent changes in District regulations that require permits for the largest non-Perc dry cleaners, and equipment registrations for smaller facilities. Considering that additional revenue will be derived from dry cleaners with these new requirements, staff believes that a 9 percent fee increase is appropriate for Schedule I.

Schedule M: Major Stationary Source Fees

The District cannot directly evaluate Schedule M (which is an emissions-based fee that applies to various types of sources) for cost recovery, but rather distributes the revenue from Schedule M into the appropriate source-specific permit fee schedules when

evaluating cost recovery for those schedules. A 15 percent increase for Schedule M is considered appropriate because revenue from this schedule has been reduced (on an inflation-adjusted basis) due to declining emissions, without a commensurate reduction in District activity costs.

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

Fee revenue for Schedule Q has been very low in recent years, as relatively few reports that trigger a fee under Rule 8-40 have been submitted to the District. Due to the low level of activity, invoices to collect these fees in many cases were not sent by District staff. Staff believes that a 3 percent increase in fees for Schedule Q is appropriate.

Schedule R: Equipment Registration Fees

The fees for Schedule R were added in 2007 and 2008, and most of these have not yet become effective. Because of this, no increases in registration fees under Schedule R are proposed for FYE 2010. The proposed revisions to Schedule R are limited to several minor grammatical improvements.

Schedule T: Greenhouse Gas Fees

District staff began specifically tracking activity data for Schedule T in FYE 2009 after that schedule was initially adopted. Due to a lack of at least one full year of activity data for this schedule, a cost recovery analysis could not be completed. Staff believes that a 3 percent "cost of living adjustment" for Schedule T is appropriate because activity levels for the Climate Protection Program in the next fiscal year are expected to be at least as high as activity levels in the current fiscal year.

The focus of District efforts related to AB-32 implementation has shifted from the development of the Scoping Plan to the development and implementation of the Plan's measures. The majority of this work must be completed by December 31, 2010, with most regulations and other initiatives going into effect by January 1, 2012. This means that more than 20 Scoping Plan measures will need to be adopted by CARB in 2009 and 2010.

Air districts are expected to play a prominent role in the implementation and enforcement of many of the Scoping Plan's stationary source measures. On February 26, 2009, CARB adopted one of the initial Scoping Plan measures for stationary sources, which applies to semiconductor facilities. The new semiconductor rule establishes the air districts as being the primary agencies responsible for implementation and enforcement of the rule. Initial emissions reports are due to be submitted to the District in 2011, along with permit applications for any required emission control equipment.

It should be noted that CARB has begun development of an AB 32 Administrative Fee

regulation, and is expected to bring this regulation to their Board for consideration of adoption in the first half of 2009. These fees are intended to recover State agency costs associated with AB 32, and not air district costs. CARB has indicated that it may establish district fees within individual GHG regulations, but none have been established to date. District staff may propose adjustments to the fee rate in Schedule T in the future if upcoming CARB regulations result in an additional source of revenue to recover Climate Protection Program activity costs.

Schedule U: Indirect Source Review Fees

Schedule U was not included in the initial District fee proposal, but was added with a public notice issued on March 18, 2009.

The District has initiated development of an Indirect Source Review (ISR) Rule to address the adverse impacts of growth on local and regional air quality and climate change. District staff anticipates proposing an ISR Rule for consideration by the District's Board of Directors in 2010. The proposed ISR Rule is one of several elements of a more comprehensive approach to address health concerns in communities that are disproportionately impacted by poor air quality and to minimize the cumulative effects of land use decisions on local and regional air quality. This multifaceted approach will coordinate ongoing efforts at the District and develop and implement key enhancements to existing District programs. This will provide a cohesive strategy that will assist in the growth of the Bay Area while protecting public health and minimizing impacts on climate.

Indirect sources are development projects that generate or attract motor vehicle trips, and also may include other sources of emissions, such as fireplaces, home heating and cooling and landscape maintenance equipment, that indirectly cause air pollutant emissions that can adversely affect local and regional air quality. Health and Safety Code Section 40716 grants explicit authority to air districts to "…adopt and implement regulations to …reduce or mitigate emissions from indirect and areawide sources of air pollution." The District currently implements various programs to reduce emissions from indirect sources, including: Transportation Fund for Clean Air grants for bicycle facilities, traffic calming, shuttles and other projects; promotion of air quality elements in local general plans; review and comment on CEQA documents; and cooperation with other regional agencies and stakeholder groups.

The Bay Area is not yet in attainment of state ozone standards, so the region must implement all feasible measures to reduce the precursor pollutants that form ozone: nitrogen oxides and volatile organic compounds. Further Study Measure FS-18 of the District's 2005 Ozone Strategy proposed additional evaluation of an ISR Rule to assist the region in meeting health based ambient air quality standards and requirements in the California Clean Air Act. In addition, air districts throughout the State are required to adopt all feasible measures as expeditiously as practicable. The San Joaquin Valley Unified APCD's Rule 9510 Indirect Source Regulation, was adopted in December 2005. Imperial County APCD also has adopted and is implementing an ISR rule.

The District ISR Rule would require that development projects above specified sizes prepare an Air Quality Impact Assessment for District review. Project impacts above certain thresholds would need to be mitigated through changes in the project design, and/or through the payment of offsite emission mitigation fees. The offsite emission mitigation fees would be used by the District to fund projects to reduce emissions in the Bay Area.

The District is proposing to add Schedule U for the purpose of assessing administrative and mitigation fees associated with implementation of the upcoming ISR Rule. The proposed fees are preliminary estimates and could be amended as the ISR Rule is developed. The proposed Schedule U includes an application filing fee of $533 for residential projects, and $796 for non-residential and mixed-use projects. These fees are based on estimated minimum staff resources (i.e., 8 hours and 12 hours for residential and non-residential projects, respectively) for reviewing an Air Quality Impact Assessment. The application evaluation fee is set to recover the District's actual costs of evaluating the application, and the filing fee would be credited towards the evaluation fee. The new fee schedule would also include an offsite emission reduction fee, but the details of this fee would be determined at a later date.

4. PROJECTED FEE REVENUE AND COSTS OF PROGRAM ACTIVITIES

With the proposed amendments, the District's total projected fee revenue for FYE 2010 is $30.4 million. The 2009 Cost Recovery Study indicated that, for the last complete fiscal year analyzed (FYE 2008), the District's total regulatory program activity costs were $46.3 million.

5. STATUTORY AUTHORITY FOR PROPOSED FEE INCREASES

State law authorizes air districts to adopt fee schedules to cover the costs of various air pollution programs. 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 (i.e., operating/new and modified permit fees) to 15 percent per year.

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 the proposed fees for Indirect Source Review.

H&S Code section 44380(a) authorizes air districts to adopt a fee schedule that recovers the costs to the air district and the State 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. The section provides the authority for the District to collect Hearing Board fees under Schedule A.

The proposed fee amendments are in accordance with all applicable authorities provided in the California Health and Safety Code. Based on the results of the 2009 Cost Recovery Study, permit fee revenue after adoption of the proposed amendments would still be well below the District's direct and indirect program activity costs associated with air quality programs covering permitted sources. Similarly, Hearing Board fee revenue would still be below the District's program activity costs associated with Hearing Board activities related to variances and permit appeals. Finally, fee revenue from non-permitted areawide sources would not exceed the District's program activity costs for these sources.

6. ASSOCIATED IMPACTS AND OTHER RULE DEVELOPMENT REQUIREMENTS

6.1 EMISSIONS IMPACTS

There will be no direct increase or decrease 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 considered 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 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. Table 3 provides a summary of typical annual permit renewals fees projected for FYE 2010 for various sizes of dry cleaners, auto body shops, gasoline stations, and facilities with only diesel engine backup generators (BUGs), along with the estimated increase in renewal fees relative to the current FYE 2009.

Table 3. Projected Typical Annual Permit Renewal Fees for FYE 2010, and Increases in Renewal Fees Relative to FYE 2009

Facility Size →	**Small**		**Medium**		**Large**	
Permit Fees	**Total Fee**	**Increase**	**Total Fee**	**Increase**	**Total Fee**	**Increase**
Dry Cleaner	$403	$26	$444	$28	$1,226	$75
Auto Body Shop	$330	$38	$330	$38	$656	$75
Gasoline Station	$850	$104	$1,632	$203	$2,415	$302
Diesel BUG Facility	$319	$14	$398	$18	$1,142	$78

Table Notes
Small Dry Cleaner: One machine, 50 gal/yr Perc
Medium Dry Cleaner: One machine; 150 gal/yr Perc
Large Dry Cleaner: Two machines; 400 gal/yr Perc
Small Autobody Shop: One Booth; 100 gal/yr paint; 50 gal/yr cleanup
Medium Autobody Shop: One Booth; 200 gal/yr paint; 75 gal/yr cleanup
Large Autobody Shop: Two Booths; 500 gal/yr paint; 200 gal/yr cleanup
Small Gasoline Station: Four triple product nozzles
Medium Gasoline Station: Eight triple product nozzles
Large Gasoline Station: Twelve triple product nozzles
Small Diesel BUG Facility: One 500-HP diesel engine
Med. Diesel BUG Facility: One 1500-HP diesel engine
Large Diesel BUG Facility: Two 2000-HP diesel engines

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. A comparison of permit renewal fees completed for the facility types given in Table 3 indicated that South Coast AQMD fees are approximately 40 percent higher than District fees, on average.

The annual permit renewal fees for the five Bay Area refineries, the District's highest fee

payers, would increase by an average of $150,000. The largest of these facilities would see an increase in annual permit fees of about $198,000.

District staff is sympathetic to businesses that are impacted by the current economic downturn, but feel that the additional fee revenue is needed to continue the District's core regulatory programs and other air quality initiatives. Even with these fee increases, overall District fee revenue will continue to fall well short of the point of full cost recovery. 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;
- Authorized by H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9;
- Clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Consistent with other District rules, and not in conflict with any state or federal law;
- Not duplicative of other statutes, rules or regulation; and
- Implements and references H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9.

7. RULE DEVELOPMENT PROCESS

On January 29, 2009, 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 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 February 23, 2009. Nine members of the public attended the workshop. On February 25, 2009, District staff provided a briefing on the proposed amendments to the District Board of Directors' Budget and Finance Committee. A Public Hearing Notice was issued on March 16, 2009.

Schedule U was not included in the initial District fee proposal, but was added with a public notice issued on March 18, 2009. This notice was posted on the District website and distributed to approximately 900 stakeholders including the executives of various Bay Area agencies, city and county planning staff, and non-governmental organizations.

On March 24, 2009, a notice was issued indicating that the District's fee proposal had been revised to include a 50 percent increase for Schedule G-5 (covering refinery flares), rather than the 15 percent increase initially proposed. That notice was posted on the District website and provided to the five Bay Area refineries, along with the Western States Petroleum Association and California Council for Environmental and Economic Balance.

On March 30, 2009, District staff provided an update on the proposed fee amendments to the District Board of Directors' Budget and Finance Committee. The Committee provided direction to staff to continue rule development efforts based on the current staff proposal.

A public hearing to accept testimony on the proposed amendments has been scheduled for April 15, 2009. A second public hearing has been scheduled for May 20, 2009, to consider adoption of the proposed amendments. If adopted, the amendments would be made effective on July 1, 2009.

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, Schedule S: Naturally Occurring Asbestos Operations, and the proposed Schedule U: Indirect Source Review Fees. The two public hearings previously described will fulfill the requirements of H&S Code section 41512.5.

8. PUBLIC COMMENTS

As of the date of this report, four sets of written comments had 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) Najmeddin Ravan of Emeryville Chevron, (3) David Schonbrunn of Transportation Solutions Defense and Education Fund (TRANSDEF), and (4) Camille Kustin and Kathryn Phillips of Environmental Defense Fund (EDF). Several other comments were provided orally at the public workshop (nine members of the public attended), and one comment was made through a telephone conversation with District staff. A summary of the comments received, and District staff responses to these comments, follows.

Emeryville Chevron Comments: The commenter indicates that when his gas station was built in 1999 the District required a "balance system". He indicates that within five years an "EVR vacuum system" was required to be installed at a cost of $18,000. He indicates that two years ago the State Water Resources Control Board set a requirement for "EVR Phase II", and that the costs of meeting this requirement are $60,000 or more. He indicates that funds for loans were depleted by the time that he had filled out the loan application. The commenter indicates that fee increases would be an undue burden on small businesses at the worst time possible. He indicates that fees should not be increased in this bad economy, and that budget shortages should be filled from the reserve account or by cutting staff salaries.

Response: The District acknowledges the difficulties that small businesses are having in the economic downturn but believes that the proposed fee increases are needed to maintain core regulatory programs. The fee revenue collected from gas stations currently covers only about one-third of the District's regulatory program activity costs.

Under the staff proposal, the annual permit renewal fee for the Emeryville Chevron facility would be increased by $203. The District does not believe that this fee increase should have a significant financial impact on this business.

The District respectfully disagrees with some of the commenter's statements relative to the vapor recovery upgrades completed at his facility. When this station was rebuilt in 1999, an existing balance system was replaced with a Vacuum Assist system, but this was not a requirement of the District or CARB. A balance system was an option, and in fact this was the type of system that was specified in the original Authority to Construct issued by the District for the project. Had a balance system been installed, the $18,000 upgrade that the commenter mentions (completed in 2006) could have been avoided.

The District agrees that the costs of complying with the CARB Enhanced Vapor Recovery (EVR) program (not the State Water Resources Control Board, which implements the underground storage tank program) have been significant for gas stations throughout California. The EVR program has also significantly increased the District's costs of regulating gas stations, which are collectively a very significant source of ozone precursor emissions in the Bay Area. The required upgraded vapor recovery

equipment should significantly reduce emissions from these facilities and justify the resulting costs.

The District does not believe that reserve accounts should be used to balance the District's budget, unless other options are infeasible.

CCEEB Comments: The commenter indicates that he does not agree with the initial District fee proposal, which he characterizes as a "business-as-usual" approach. He indicates that extreme economic conditions are being faced throughout the economy, and that the proposed double-digit fee increases to most categories would have significant consequences to both small and large facilities. He indicates that the fee proposal would amount to well over $100,000 annually for some of the largest Bay Area facilities. He indicates that California lost almost 500,000 jobs in the past year, and that struggling businesses are subject to fee increases at every level. He indicates that the District should take this universe of fees, and compliance costs, into account especially as AB 32 mandates roll out at the state level. The commenter suggests that the District set a goal to keep the District budget for the upcoming fiscal year below 2008/09 levels, and consider some limited use of reserve accounts.

Response: District staff is sympathetic to businesses that are impacted by the current economic downturn, but feel that the additional fee revenue is needed at this time as property tax revenue is expected to decline. Even with the proposed fee increases, overall fee revenue will continue to fall well short of the point of full cost recovery.

The proposed fee amendments are expected to increase annual permit renewal fees by more than $100,000 for four Bay Area facilities, all of which are petroleum refineries. These facilities are not expected to suffer financial hardships from these fee increases.

Some facilities that have reduced production levels due to the economic downturn will likely see a reduction in their permit fees, even with the proposed increases in fee rates. This is the case for larger solvent users that fall under Fee Schedule E (e.g., the New United Motor Manufacturing, Inc. facility in Fremont), which pay fees based on reported solvent usage.

TRANSDEF Comments: The commenter indicates that he strongly supports the adoption of an ISR Rule. He suggests, however, that the term "Indirect Source Mitigation Fee" be used rather than "Indirect Source Review".

Response: The District does not believe that it is appropriate to name the new Fee Schedule U "Indirect Source Mitigation Fee", because both application fees and mitigation fees are proposed. The term that the District has proposed to use for the mitigation fee is "Offsite Emission Reduction Fee". This is similar to what the commenter proposes, but it is also believed to more appropriate in that it correctly implies that the fee will be used for reducing emissions that are offsite (i.e., not a part of the proposed project).

EDF Comments: The commenters indicate that they support the proposed fee schedule. They suggest that all feasible onsite mitigation be required for a project before offsite mitigation is allowed.

Response: The proposed Fee Schedule U does not dictate the manner in which mitigation will be required under ISR – this will be determined in the upcoming ISR Rule. The District has noted the comments provided, and will consider them in the development of the ISR Rule.

Other Comments: Two gas station owners (in addition to Mr. Ravan, who provided written comments that were previously summarized) complained about the EVR program and the high costs of several different types of equipment upgrades that have been required since the year 2000. These individuals indicated that permit fees should be reduced because of these EVR upgrade costs. Another commenter, an owner of an auto body shop, indicated that fees should not be increased during the economic downturn. Finally, a commenter recommended that the District reduce costs rather than increase fees.

Response: The EVR program was established by CARB, and not the District. The program was adopted because existing vapor recovery equipment at gas stations was resulting in significant excess emissions. The EVR program is addressing this issue, albeit with increased costs to both the gas stations and the air districts. The cost recovery analysis completed by the District indicates that the fee revenue received from gas stations covers only a small fraction of the District's costs of regulating these facilities. The District will reconsider the permit fees for gas stations in future years if program activity costs decline.

As was previously mentioned, the District is sympathetic to businesses that are impacted by the current economic downturn, but feel that additional fee revenue is needed to maintain core regulatory programs and other air quality initiatives. The District will continue to implement cost containment measures, and has included a number of these in the proposed FYE 2010 budget.

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

STAFF REPORT

PROPOSED AMENDMENTS TO BAAQMD REGULATION 3: FEES

MAY 12, 2008

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, ~~and~~ 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)

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 $600,000 that is not an affiliate of a non-small business.

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

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 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)

3-300 **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 ~~$318~~$337, 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 ~~$318~~$337, 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.

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 ~~$318~~$337 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.

(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)

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)

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 ~~$65~~$69 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)

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 ~~$318~~$337 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 ~~$318~~$337.

(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)

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 ~~$802~~$850 for each source included in the alternative compliance plan, not to exceed ~~$8,027~~$8,509.

(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)

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 $2000 per application, and

318.2 The District's cost exceeding $2000 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)

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 ~~$7,306~~$7,744 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)

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 ~~$63~~$67 for facilities with one permitted source, including gasoline dispensing facilities,

327.2 ~~$123~~$130 for facilities with 2 to 5 permitted sources,

327.3 ~~$246~~$261 for facilities with 6 to 10 permitted sources,

327.4 ~~$369~~$391 for facilities with 11 to 15 permitted sources,

327.5 ~~$491~~$520 for facilities with 16 to 20 permitted sources,

327.6 ~~$614~~$651 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)

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.

(Adopted June 6, 2007

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.

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)

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	~~$1993~~ $2292 ~~$997~~ $1147	~~$298~~ $343 ~~$100~~ $115	
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	~~$1197~~ $1377 ~~$597~~ $687	~~$298~~ $343 ~~$100~~ $115	
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.....	~~$795~~ $914 ~~$597~~ $687	~~$100~~ $115 ~~$100~~ $115	
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.....	~~$795~~ $914 ~~$597~~ $687	~~$100~~ $115 ~~$100~~ $115	
5.	For each application to revoke a variance	~~$1197~~ $1377	~~$100~~ $115	
6.	For each application for approval of a Schedule of Increments of Progress in accordance with §41703.....	~~$795~~ $914	~~$100~~ $115	
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	~~$1993~~ $2292 ~~$997~~ $1147	~~$298~~ $343 ~~$100~~ $115	
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	~~$1197~~ $1377 ~~$597~~ $687	~~$298~~ $343 ~~$100~~ $115	

		Large Companies	Small Business	Third Party
9.	For each Appeal (Permit, Banking, Title V).....	~~$1993~~ $2293 per hearing day	~~$997~~ $1147 per hearing day	~~$997~~ $1147 for entire appeal period
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.6 & 4.6.....	~~$997~~ $1147	~~$200~~ $230	
11.	For each application to Modify or Terminate an abatement order.....	~~$1993~~ $2292 per hearing day	~~$997~~ $1147 per hearing day	
12.	For each application for an interim variance in accordance with §42351	~~$997~~ $1147	~~$200~~ $230	
13.	For each application for an emergency variance in accordance with §42359.5.....	~~$497~~ $572	~~$100~~ $115	
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	~~$997~~ $1147	~~$298~~ $343	~~$298~~ $343
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)	~~$200 or cost per day if~~ Actual Appearance and Transcript costs per hearing solely dedicated to one Docket	$0	~~$200 or cost per day if~~ Actual Appearance and Transcript costs per hearing solely dedicated to one Docket

NOTE 1 Any person who certifies under penalty of perjury that payment of the foregoing fees will cause an unreasonable hardship, may be excused from the payment of fees by order of the Hearing Board on that account.

(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)

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 ~~$1.91~~$2.20 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 ~~$9.50~~$10.93 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 ~~$2.13~~$2.45

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 ~~$2.13~~$2.45

* 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)

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: ~~$39.95~~$42.35 per MM BTU/HOUR
   a. The minimum fee per source is: ~~$213~~$226
   b. The maximum fee per source is: ~~$74,545~~$79,018
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: ~~$318~~$337 plus ~~$39.95~~$42.35 per MM BTU/hr
   b. Minimum RSF for first TAC source: ~~$531~~$563
   c. RSF for each additional TAC source: ~~$39.95~~$42.35 per MM BTU/Hr *
   d. Minimum RSF per additional TAC source: ~~$213~~$226 *
   e. Maximum RSF per source is: ~~$74,545~~$79,018
      * 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: ~~$19.97~~$21.17 per MM BTU/HOUR
   a. The minimum fee per source is: ~~$152~~$161
   b. The maximum fee per source is: ~~$37,272~~$39,508
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)

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: 0.165 cents per gallon
   a. The minimum fee per source is: $182
   b. The maximum fee per source is: $24,806
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: ~~$318~~$337 plus 0.165 cents per gallon
   b. Minimum RSF for first TAC source: ~~$482~~$519
   c. RSF for each additional TAC source: 0.165 cents per gallon *
   d. Minimum RSF per additional TAC source: $182 *
   e. Maximum RSF per source is: $24,806
      * 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: 0.083 cents per gallon
   a. The minimum fee per source is: $130
   b. The maximum fee per source is: $12,403
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)

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: ~~$144.30~~$165.95 per single product nozzle (spn)
~~$144.30~~$165.95 per product for each multi-product nozzle (mpn)

2. PERMIT TO OPERATE FEE: ~~$55.27~~$63.56 per single product nozzle (spn)
~~$55.27~~$63.56 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:

~~$199.57~~$229.51 × {[($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 ~~$318~~$337 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: ~~$1,896~~$2,180 per single product loading arm
~~$1,896~~$2,180 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: ~~$2,214~~$2,517
   b. RSF for each additional TAC source: ~~$1,896~~$2,180 *
      * 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: ~~$529~~$608 per single product loading arm
~~$529~~$608 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)

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: ~~$317~~$365
   b. If usage is not more than 1,000 gallons/year: ~~$317~~$365
   c. If usage is more than 1,000 gallons/year: ~~$638~~$734 per 1,000 gallons
   d. The maximum fee per source is: ~~$25,379~~$29,186

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: ~~$318~~$337 plus initial fee
   b. Minimum RSF for first TAC source: ~~$635~~$702
   c. RSF for each additional TAC source: equal to initial fee *
   d. Minimum RSF per additional TAC source: ~~$317~~$365 *
   e. Maximum RSF per source is: ~~$25,379~~$29,186
      * 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: ~~$229~~$263
   b. If usage is not more than 1,000 gallons/year: ~~$229~~$263
   c. If usage is more than 1,000 gallons/year: ~~$317~~$365 per 1,000 gallons
   d. The maximum fee per source is: ~~$12,688~~$14,591

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)

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: ~~$301~~$328

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: ~~$619~~$665
   b. RSF for each additional TAC source: ~~$301~~$328 *
      * 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: ~~$217~~$237

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: ~~$1,803~~$2,019

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: ~~$2,121~~$2,356
   b. RSF for each additional TAC source: ~~$1,803~~$2,019 *
      * 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: ~~$900~~$1,008

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: ~~$2,618~~$2,854

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: ~~$2,936~~$3,191
   b. RSF for each additional TAC source: ~~$2,618~~$2,854 *
      * 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: ~~$1,308~~$1,426

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: $16,565

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: ~~$16,883~~$16,902
   b. RSF for each additional TAC source: $16,565 *
      * 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: $8,282

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: $47,335

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: ~~$47,653~~$47,672
   b. RSF for each additional TAC source: $47,335 *
      * 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: $23,667

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: ~~$24,848~~$37,272

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: ~~$25,166~~$37,609
   b. RSF for each additional TAC source: ~~$24,848~~$37,272 *
      * 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: ~~$12,423~~$18,635

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)

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
Foil Manufacturing – Any Converting or Rolling Lines	Any Metal or Alloy Foils
Galvanizing Equipment	Any

Equipment or Process Description	Materials Processed or Produced
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
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

Equipment or Process Description	Materials Processed or Produced
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 – Digesters	Municipal Wastewater
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: ~~$293~~$319
   b. The maximum fee per source is: ~~$23,394~~$25,499

   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: ~~$293~~$319
      ii. If gross throughput is more than 3,000 gallons/year: ~~$197~~$215 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: ~~$293~~$319
      ii. If gross throughput is more than 1,000 gallons/year: ~~$588~~$641 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: ~~$318~~$337 plus initial fee
   b. Minimum RSF for first TAC source: ~~$611~~$656
   c. RSF for each additional TAC source: equal to initial fee *
   d. Minimum RSF per additional TAC source: ~~$293~~$319 *
   e. Maximum RSF per source is: ~~$23,394~~$25,499

   * 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: ~~$211~~$230
   b. The maximum fee per source is: ~~$11,695~~$12,748

   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: ~~$211~~$230
ii. If gross throughput is more than 3,000 gallons/year: ~~$99~~$108 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: ~~$211~~$230
ii. If gross throughput is more than 1,000 gallons/year: ~~$293~~$319 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)

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: ~~$301~~$328
   b. If the washing or drying capacity exceeds 100 pounds: ~~$301~~$328 plus
      For that portion of the capacity exceeding 100 pounds: ~~$8.97~~$9.78 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: ~~$301~~$337 plus initial fee
   b. Minimum RSF for first TAC source: ~~$619~~$665
   c. RSF for each additional TAC source: equal to initial fee *
   d. Minimum RSF per additional TAC source: ~~$301~~$328 *

   * 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: ~~$217~~$237
   b. If the washing or drying capacity exceeds 100 pounds: ~~$217~~$237 plus
      For that portion of the capacity exceeding 100 pounds: ~~$4.50~~$4.91 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)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:
   a. Inactive or Closed Solid Waste Disposal Sites ~~$1,902~~$2,187
   b. Active Solid Waste Disposal Sites ~~$3,803~~$4,373

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: ~~$318~~$337 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 ~~$950~~$1,093
   b. Active Solid Waste Disposal Sites ~~$1,902~~$2,187

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) ~~$1,143~~$1,314
   b. Inactive Site Questionnaire evaluation as required by Health & Safety Code Section 41805.5(b) ~~$573~~$659
   c. Evaluation of Solid Waste Air Assessment Test report in conjunction with evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b) ~~$573~~$659
   d. Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405 ~~$421~~$484
   e. Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407 ~~$1,205~~$1,386
   f. Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409 ~~$421~~$484
   g. Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411 ~~$1,055~~$1,213

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 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)

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: ~~$101~~$110 for amounts 100 to 500 square feet or linear feet.
      ~~$374~~$408 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
      ~~$544~~$593 for amounts 1001 square feet or liner feet to 2000 square feet or linear feet.
      ~~$748~~$815 for amounts greater than 2000 square feet or linear feet.
   b. Cancellation: ~~$49~~$53 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: ~~$288~~$314 for amounts 100 to 159 square feet or 100 to 259 linear feet or 35 cubic feet
      ~~$416~~$453 for amounts 160 square feet or 260 linear feet to 500 square or linear feet or greater than 35 cubic feet.
      ~~$605~~$659 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
      ~~$892~~$972 for amounts 1001 square feet or liner feet to 2500 square feet or linear feet.
      ~~$1,272~~$1,386 for amounts 2501 square feet or linear feet to 5000 square feet or linear feet.
      ~~$1,746~~$1,903 for amounts 5001 square feet or linear feet to 10000 square feet or linear feet.
      ~~$2,221~~$2,421 for amounts greater than 10000 square feet or linear feet.
   b. Cancellation: ~~$137~~$149 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: ~~$49~~$53
   b. Cancellation: ~~$49~~$53 (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: ~~$205~~$223
   b. Cancellation: ~~$137~~$149 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: ~~$340~~$371

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: ~~$205~~$223
   b. Cancellation: ~~$137~~$149 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)

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	~~$87.63~~$100.77 per ton
2.	Sulfur Oxides	~~$87.63~~$100.77 per ton
3.	Nitrogen Oxides	~~$87.63~~$100.77 per ton
4.	PM_{10}	~~$87.63~~$100.77 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)

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 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 + $S_L \times (w_i - 1000)$ 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 Unit Risk Factor (URF) for the substance times one hundred thousand (in cubic meters/microgram) if the emission is a carcinogen, or by the reciprocal of the chronic reference exposure level REL_C) for the substance (in cubic meters/microgram) if the emission is not a carcinogen [use URF and REL_C 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 = URF * 10^5, if i is a carcinogen; or
Q_i = $[REL_c]^{-1}$, 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:

$$S_L = \frac{F_T - (75 \times N_S) - (75 \times N_L) - (5 \times N_{NOZ})}{\sum_{j=1}^{N_L} (w_j - 1000)}$$

(Amended 12/15/93; 6/15/05; 5/2/07)

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 ..... ~~$325~~$364 per source

b. MFR EMISSIONS FEE.....~~$12.80~~$14.34 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~~$3,251~~$3,641 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.....~~$453~~$507 per application

b. SYNTHETIC MINOR INITIAL PERMIT FEE ..... ~~$317~~$355 per source

c. SYNTHETIC MINOR REVISION FEE.....~~$317~~$355 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 .....~~$453~~$507 per application

b. MFR INITIAL PERMIT FEE ..... ~~$438~~$491 per source

c. MFR ADMINISTRATIVE AMENDMENT FEE .....~~$129~~$144 per application

d. MFR MINOR REVISION FEE.....~~$643~~$720 per source modified

e. MFR SIGNIFICANT REVISION FEE.....~~$1,199~~$1,343 per source modified

f. MFR REOPENING FEE .....~~$393~~$440 per source modified

g. MFR RENEWAL FEE ..... ~~$191~~$214 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 .....~~$676~~$757 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 $8,746

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 ..... ~~$77~~$86 per source, not to exceed ~~$7,605~~$8,518

(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)

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: ~~$130~~$134

(Amended 7/19/00; 8/1/01, 6/5/02, 7/2/03; 6/2/04; 6/6/07; 5/21/08)

SCHEDULE R
EQUIPMENT REGISTRATION FEES

1. Persons operating commercial cooking equipment ~~that~~who are required to register equipment as required by District rules are subject to the following fees:
   a. Conveyorized Charbroiler REGISTRATION FEE: $360 per facility
   b. Conveyorized Charbroiler ANNUAL RENEWAL FEE: $100 per facility
   c. Under-fired Charbroiler REGISTRATION FEE: $360 per facility
   d. Under-fired Charbroiler ANNUAL RENEWAL FEE: $100 per facility

2. Persons operating non-halogenated dry cleaning equipment ~~that~~who are required to register equipment as required by District rules are subject to the following fees:
   a. Dry Cleaning Machine REGISTRATION FEE: $180
   b. Dry Cleaning Machine ANNUAL RENEWAL FEE: $125

3. Persons operating diesel engines ~~that~~who are required to register equipment as required by District or State rules are subject to the following fees:
   a. Diesel Engine REGISTRATION FEE: $120
   b. Diesel Engine ANNUAL RENEWAL FEE: $80

4. Persons operating boilers, steam generators and process heaters ~~that~~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 $425 per facility
   b. Each boiler, steam generator or process heater subject to Regulation 9-7-404, after the first ONE-TIME REGISTRATION FEE $50 per device

5. Persons owning or operating graphic arts operations ~~that~~who are required to register equipment by District Regulation 8-20-408 are subject to the following fees:
   a. REGISTRATION FEE: $215
   b. ANNUAL RENEWAL FEE: $135

6. Persons owning or operating mobile refinishing operations ~~that~~who are required to register by District Regulation 8-45-4 are subject to the following fees:
   a. REGISTRATION FEE $100
   b, ANNUAL RENEWAL FEE $60

(Adopted 7/6/07; Amended 12/5/07; 5/21/08; 7/30/08; 11/19/08; 12/3/08)

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): ~~$232~~$267

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: ~~$2,060~~$2,369

(Adopted 6/6/07; Amended 5/21/08)

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 ~~$0.044~~$0.045 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-43-1-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 May 21, 2008)

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: $533
   b. Non-residential or mixed use project: $796

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)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer / APCO

Date: April 8, 2009

Re: Advisory Council Report and Recommendations on the February 11, 2009 Meeting on Air Quality and Public Health

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

The following presentations were made at the February 11, 2009 Advisory Council Meeting on Air Quality and Public Health:

1. ***Community Air Risk Evaluation Program (CARE) Overview*** by Phil Martien, PhD, CARE Program Manager, Bay Area Air Quality Management District.

2. ***Public Health, Air Quality, & Equity*** by Dr. Anthony Iton, Alameda County Health Officer.

3. ***Health Disparities in Contra Costa*** by Dr. Wendel Brunner, Director of Public Health for the Contra Costa County Health Services Department.

4. ***Air Pollution Hot Spots: Unregulated Health and Environmental Justice Issues in the United States*** by Dr. Rajiv Bahtia, Director of Occupational and Environmental Health for the City and County of San Francisco's Department of Public Health, and Assistant Clinical Professor of Medicine at the University of California at San Francisco.

5. ***Air Quality and Public Health Santa Clara County*** by Dr. Martin Fenstershieb, Health Officer for Santa Clara County.

DISCUSSION

At the March 11, 2009 meeting, the Advisory Council voted to have two meetings to discuss the meeting on Air Quality and Public Health and prepare a report for the Air District Board of Directors. The two meetings were the originally scheduled March 11th meeting and a second meeting held on April 8th.

Advisory Council members Sarah Martin-Anderson, Jenny Bard, Karen Licavoli Farnkopf**,** Jane Martin, and Dorothy Vura-Weis prepared a draft report for the February 11, 2009 meeting on Air Quality and Public Health, and thereafter, discussed and revised the draft report at the March 11, 2009 Advisory Council meeting. At the April 8th meeting, the Advisory Council discussed the

revised draft report for the meeting on Air Quality and Public Health, finalized their recommendations. The attached final report will be presented for consideration at the Board of Directors April 15, 2009 meeting.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS:

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer / APCO

FINAL REPORT ON THE FEBRUARY 11, 2009 ADVISORY COUNCIL MEETING ON AIR QUALITY AND PUBLIC HEALTH FOR DISCUSSION BY THE ADVISORY COUNCIL

SUMMARY

The following presentations were made at the February 11, 2009 Advisory Council Meeting on Air Quality and Public Health:

1. ***Community Air Risk Evaluation Program (CARE) Overview*** by Phil Martien, Ph.D., CARE Program Manager, Bay Area Air Quality Management District.

2. ***Public Health, Air Quality, & Equity*** by Dr. Anthony Iton. Dr. Iton is the Alameda County Health Officer. His primary interest is the health of disadvantaged populations and the contributions of race, class, wealth, education, geography, and employment to health status. He has asserted that the biggest single contributor to our country's vulnerability to bioterrorism is the lack of a universal system of health insurance for all Americans. Dr. Iton collaborated with California Newsreel in the creation of *Unnatural Causes … Is Inequality Making Us Sick?* This is currently being shown on public television stations across the country.

3. ***Health Disparities in Contra Costa*** by Dr. Wendel Brunner. Dr. Brunner is the Director of Public Health for the Contra Costa County Health Services Department. Contra Costa has a population of over one million people with 18 cities in the San Francisco Bay Area. The Health Department has been working the City of Richmond to develop and implement a Health Element for the Richmond General Plan. Since he became Public Health Director nearly 20 years ago, Dr. Brunner has stood boldly behind movements such as environmental justice, an effort to force government and industry to counter years of neglect suffered by poor minority neighborhoods.

4. ***Air Pollution Hot Spots: Unregulated Health and Environmental Justice Issues in the United States*** by Dr. Rajiv Bahtia. Since 1998, Dr. Bahtia has served as the Director of Occupational and Environmental Health for the City and County of San Francisco's Department of Public Health. Bhatia is also an Assistant Clinical Professor of Medicine at the University of California at San Francisco and teaches a course in the Health Impact Assessment of Public Policy at UC Berkeley.

5. ***Air Quality and Public Health Santa Clara County*** by Dr. Martin Fenstersheib. Dr. Fenstersheib has been the Health Officer for Santa Clara County since 1994. He has been active at the local, state and national levels in the area of disaster

preparedness since 1997. Dr. Fenstersheib has made various presentations about pandemic influenza to various community groups and organizations. Dr. Fenstersheib is the VP of the Santa Clara County Medical Association and the Past President of the California Conference of Local Health Officials.

The speakers discussed health disparities related to air quality and potential mitigation measures in Alameda, Contra Costa, Santa Clara and San Francisco counties.

In addition, comments were taken from a number of members from the public:

February 11, 2009: Margaret Gordon, WOEIP; Sam Altshuler, former Advisory Council Member; Karen G. Pierce, Bayview Hunters Point Community Advocates; Wafaa Aborashed, Healthy 880 Communities; Marie Harrison, Green Action; and Linda Weiner, Bay Area Clean Air Task Force.

March 11, 2009: Ken Kloc, Bay Area Environmental Health Collaborative and Environmental Law and Justice Clinic

April 8, 2009: Ken Kloc, Bay Area Environmental Health Collaborative and Environmental Law and Justice Clinic

DISCUSSION MEETING

Due to the complex nature of the topic, Air Quality and Public Health, for the February 11, 2009 Advisory Council Meeting, the large number of new Council members and the implications for Air District policies and programs, the Advisory Council voted at its March 11, 2009 meeting to have *two* meetings to discuss the Air Quality and Public Health topic and prepare a report for the Air District Board of Directors. The two meetings were the originally scheduled March 11th meeting and a second meeting held on April 8th.

Five Advisory Council members, Sarah Martin-Anderson, Jenny Bard, Karen Licavoli Farnkopf**,** Jane Martin, and Dorothy Vura-Weis prepared a draft report on the February 11, 2009 meeting on Air Quality and Public Health. At its March 11, 2009 meeting the Advisory Council reviewed and discussed the four presentations, materials received and the draft report on the February 11th meeting on Air Quality and Public Health. Council members suggested a number of revisions and edits to the draft report.

Based on Council members' suggestions, the five Council members listed above revised the original draft report and the *revised* draft report was included in the Agenda packet for the April 8th meeting. Council members discussed the *revised* draft report on Air Quality and Public Health at the April 8th meeting, finalized the recommendations, and completed the final report, including the following Key Points, Emerging Issues and Recommendations.

KEY POINTS

Based upon speakers, members of the public and Advisory Council discussion, below is a summary of the key points made by the Public Health Officers. These reflect themes common to the presentations, those that are especially relevant to the activities of the BAAQMD.

1. Public Health Impact: Ill health is more concentrated in low-income communities, particularly those of color. Poverty, race, lack of political power, and air pollution have complex interactions that contribute to poor health and shortened life expectancy. Health and social inequities are positively correlated with exposure to sources of air pollution, such as freeways and industrial sources.

2. Need for improved data: Communities need to be armed with information and tools to protect public health. Air quality data is not presented in a form that is easily accessible or usable to either public health staff or the general public. This concern applies both to the content of the data (e.g., quantitative data, geographies represented) and the language (reading level) of the data presented. More detailed and localized data are needed to assist public health departments in assessing health impacts from air pollution sources. Data drives policy.

3. Specific pollutant effects: PM 2.5 has greater health impacts than ozone and toxic air contaminants (TACs). Federal and State programs geared towards criteria pollutants address regional targets and do not identify hotspots. This represents an important gap in monitoring.

4. Pollution sources: Transportation is the largest source of ozone precursors, particles, toxic air contaminants, and greenhouse gases. Measured trends in toxic air contaminants shows risk reduction, Bay Area average cancer risk is decreasing, but risk in some locations is high compared to average. BAAQMD must be more proactive in regulating mobile sources of pollution within the legal constraints. Indirect Source Review is important for this reason. BAAQMD should recognize roadways as a source to be measured—many of the speakers made the connection between roadways and health outcomes in the bordering communities. Areas within 500 feet of roadways are generally the most impacted and there are reliable models of air dispersion to predict pollution accumulation.

5. Involvement in Land Use Planning: Integration of public health into land use decision-making is critical, but the financial constraints of Public Health Departments necessitate BAAQMD cooperation and guidance in this process. The Environmental Impact Report (EIR) process provides a mechanism for the air district to require mitigation of health impacts from land use planning. Don’t limit what BAAQMD does, or what data it makes available, to what is within the regulatory jurisdiction.

6. Leadership Role: BAAQMD can foster greater improvement in public health, and in community relations, by expanding its leadership role beyond what it is legally required to do. If we have strong regional targets to reduce greenhouse gases (GHG), we get the co-benefits of reduction in all pollution.

7. Public Health Approaches: BAAQMD's charge is to improve air quality in order to protect public health and therefore there is a strong theme of collaboration. Public health agencies have a strong relationship with the community and can facilitate linkages between BAAQMD and community groups. One way to create change is to shift the balance of power among industry, policymakers, and communities. Imbalance of power is a root cause of health inequity. By partnering with public health agencies, BAAQMD can play an important role in helping communities advocate for themselves.

8. Cumulative Impacts Approach: A cumulative impacts approach recognizes that criteria air pollutant sources may also produce localized hot-spots in some neighborhoods, similar to toxic air contaminant sources, and that some criteria air pollutant sources may need additional controls to protect people on smaller geographic scale than on an urban scale or regionally. The Bay Area Air Quality Management District has already recognized the need for a cumulative impacts approach by adopting Resolution 2008-10. New rules are needed to address current gaps in monitoring and health risk assessment.

EMERGING ISSUES

1. Health disparities and the relationship to cumulative impacts.
2. Noise pollution has negative health impacts, and is often present in the same locations as other pollutants.
3. Roadways are currently unregulated sources, falling outside the focus of both BAAQMD and CARB.
4. The use of Health Impacts Assessments is a promising part of the Environmental Review process.
5. The study of the health impacts of fine PM is a growing field in environmental health research.

RECOMMENDATIONS

The Advisory Council recommendations are based on the presentations by the four health officers on February 11th and subsequent discussion among the Advisory Council members. Their purpose is to advance the core mission of the Bay Area Air Quality Management District of "achieving clean air to protect the public's health and the environment," and to address the fact that some communities, usually low income communities and communities of color, that often have limited political power, bear a disproportionate burden of air pollution and its negative health effects.

1. Reducing health impacts from air pollution

Take all steps necessary to close gaps in monitoring programs to address cumulative impacts and "hot spot" areas, and emphasize actions that produce immediate risk reduction, including:

- Integrate consideration of both fine and coarse PM into all Air District programs, including the CARE Program, and establish PM fine and PM coarse health-based action levels for permitting.
- Review current rules to identify potential gaps in permitting related to the establishment of PM action levels noted above, including non major sources.
- Develop additional new source and existing source rules using a cumulative impacts approach to limiting health risk at the geographic scale of one or several city blocks.
- Conduct additional studies along freeway corridors and in areas impacted by multiple pollution sources, including localized saturation monitoring studies such as the CARE Program West Oakland Measurement Study.
- Require "hot spot" analysis of regional projects (roadway expansion), and/or coordinate with transportation project sponsors who may be responsible to conduct "hot spot" analysis.
- Implement expanded air quality modeling beyond identified toxic hot spots (to include near roadway areas).
- Develop an indirect source inventory for the Bay Area that identifies both small and large indirect sources of air pollution.

2. Public Outreach and Community Collaboration

- Present air pollution data in simple, understandable language and format and make it easily available to community stakeholders.
- Work with local Public Health Departments to engage community residents on air pollution issues, and use participatory methods, like the CARE Program West Oakland On-road Diesel Truck Survey, to better assess localized impact.
- Conduct a review of the effectiveness of current community outreach efforts at the Air District and develop an outreach program based on best practices.
- Develop land use best practices for local planning agencies to reduce air pollution and greenhouse gases and increase technical assistance on methods for Environmental Impact Review processes, hot spot analyses, and mitigation strategies.
- Add a Health Officer position to the BAAQMD staff, similar to the position at the South Coast AQMD. The Health Officer could provide guidance on decision making, act as a community liaison, monitor health outcomes related to air quality, and assist local governments with land use planning strategies that reduce air pollution and greenhouse gas emissions.

3. Legislation, Regulation and Policy

The Air District should continue to take a leadership role in advocating for strong regulations and aggressive enforcement, in addition to supporting legislation to protect overburdened communities:

- Increase enforcement and be more aggressive in requiring pollution reduction plans from major polluters, such as ports, facilities, and in monitoring implementation of those plans in highly polluted areas.
- Establish more stringent requirements for large and small point sources in overburdened communities, including grandfathered sources.
- Implement Indirect Source Rules (ISR) in order to ensure protection for overburdened communities and incorporate them in updated CEQA guidelines.
- Support strong regional greenhouse gas reduction targets through the AB 32 and SB 375 implementation process, to maximize air quality co-benefits.
- Support implementation of Container Fees at Ports to pay for air pollution mitigation and public health programs and support the upcoming Lowenthal bill.
- Investigate other strategies to fund emission~~s~~ reduction<u>s</u> and increase public transit service, such as gas taxes, increased vehicle license fees, and incentive programs, and support legislation to implement those strategies.
- Investigate what limits the agency's current legislation ability to regulate mobile sources, and propose changes to the law to increase our efforts in this area.