BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS' REGULAR MEETING

July 1, 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**
JULY 1, 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.

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)

PROCLAMATION(S)/AWARDS

The Board of Directors will recognize employees who have completed milestones of twenty-five (25), thirty (30), and forty (40) years of service with the Air District during this first half of the calendar year.

CONSENT CALENDAR (ITEMS 1 – 7)

Staff/Phone (415) 749-

1. Minutes of June 3, 2009 — **L. Harper/5073** lharper@baaqmd.gov

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

   Information only.

3. District Personnel on Out-of-State Business Travel — **J. Broadbent/5052** jbroadbent@baaqmd.gov

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

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

5. Consideration of Authorization for Execution of Purchase Order in Excess of $70,000 Pursuant to Administrative Code Division II Fiscal Policies and Procedures Section 4.3 Contract Limitations **J. Broadbent/5052**
jbroadbent@baaqmd.gov

The Board of Directors will consider authorizing the Executive Officer/APCO to execute a purchase order to EcoInteractive for Residential Wood Burning Status Phone Number (1-877-4NO-BURN), Wood Smoke Complaint System, Customer Service and Data System in an amount not to exceed $125,000.

6. Consideration of an Amendment to a Contract for the West Oakland Measurement Study
J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider authorizing an amendment to a contract with Desert Research Institute to assist with the West Oakland Measurement Study, in an amount not to exceed $112,300.

7. Set Public Hearing for August 5, 2009 to Consider Proposed Amendments to Regulation 8, Rule 32: Wood Products Coatings; Manual of Procedures, Volume I, Number 6: Emissions Averaging Procedure; and Adoption of a CEQA Negative Declaration **J. Broadbent/5052**
jbroadbent@baaqmd.gov

COMMITTEE REPORTS AND RECOMMENDATIONS

8. Report of the **Mobile Source Committee Meeting** of June 25, 2009
CHAIR: S. HAGGERTY **J. Broadbent/5052**
jbroadbent@baaqmd.gov

Action(s): The Committee recommends Board of Directors' approval of the following:

A) Carl Moyer Program Off-Road Equipment Replacement Program:

1. *Approve District implementation of an off-road equipment replacement program component of the Carl Moyer Program; and*
2. *Authorize the Executive Officer/APCO to execute contracts with vendors and dismantlers to implement the Carl Moyer Program Off-Road Equipment Replacement Program.*

B) Carl Moyer Program Year 11 Projects with Proposed Grant Awards over $100,000:

1. *Approve Carl Moyer Program Year 11 projects with proposed grant awards over $100,000; and*
2. *Authorize the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program Year 11 projects.*

C) FY 2009/2010 Bicycle Facility Program: Annual Report for FY 2008/2009 and Proposed Revisions to Policies and Adoption of Programs for FY 2009/2010:

1. *Receive and file the Annual Report for the Bicycle Facility Program for Fiscal Year 2008/2009;*
2. *Approve the proposed Bicycle Facility Program Policies, presented in Attachment B, for use in Fiscal Year 2009/2010 and in subsequent years; and*
3. *Approve the allocation of $600,000 in TFCA Regional Funds to the Bicycle Facility Program for Fiscal Year 2009/2010, and the authorization for the Executive Officer/APCO to execute funding agreements in accordance with the Board-approved Bicycle Facility Program Policies.*

9. Report of the **Executive Committee Meeting** of June 29, 2009

CHAIR: P. TORLIATT **J. Broadbent/5052**
jbroadbent@baaqmd.gov

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

A) Amend the Administrative Code to re-establish a two-year term of office for Board Officers;

B) Send a letter of support for Supervisor Ken Yeager's appointment as the Bay Area Air Quality Management District representative on the California Air Resources Board.

PUBLIC HEARING

10. Public Hearing to consider adoption of proposed amendments to Regulation 8, Rule 3: Architectural Coatings, and adoption of a CEQA Negative Declaration **H. Hilken/4642**
hhilken@baaqmd.gov

Proposed amendments to Regulation 8, Rule 3 reduce volatile organic compound (VOC) emissions from the application of architectural coatings. Architectural coatings are applied to homes, buildings, fences, roadways, bridges, signs and other structures. The District proposed to consider VOC reductions under the 2005 Ozone Strategy Further Study Measure FS-2 and the amendments reflect a 2007 Suggested Control Measure developed by the ARB.

CLOSED SESSION

11. **PUBLIC EMPLOYEE PERFORMANCE EVALUATIONS (GOVERNMENT CODE SECTION 54957 AND 54957.6)**

Pursuant to Government Code Section 54957 and 54957.6, the Board of Directors will meet in closed session to conduct performance evaluations of the Executive Officer/APCO and District Counsel.

OPEN SESSION

OTHER BUSINESS

12. Report of the Executive Officer/APCO

13. Chairperson's Report

14. Time and Place of Next Meeting –Wednesday, July 15, 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

JUNE 2009

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Mobile Source Committee – *(Meets 4th Thursday of each Month)*	Thursday	25	9:30 a.m.	4th Floor Conf. Room
Board of Directors Executive Committee – *(At the Call of the Chair))*	Monday	29	9:30 a.m.	4th Floor Conf. Room

JULY 2009

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	Wednesday	1	9:45 a.m.	Board Room
Advisory Council Regular Meeting	Wednesday	8	9:00 a.m.	Board Room
Board of Directors Climate Protection Committee *(Meets 2nd Thursday each Month)* **- CANCELLED / TO BE RESCHEDULED**	Thursday	9	9:30 a.m.	4th Floor Conf. Room
Board of Directors Stationary Source Committee *(Meets 3rd Monday Quarterly)*	Monday	13	9:30 a.m.	Board Room
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	Wednesday	15	9:45 a.m.	Board Room
Board of Directors Ad Hoc Cme. on Port Emissions *(At the Call of the Chair)*	Thursday	16	9:30 a.m.	4th Floor Conf. Room
Joint Policy Committee	Friday	17	10:00 a.m.	MTC Auditorium 101 8th Street Oakland, CA 94607
Board of Directors Mobile Source Committee – *(Meets 4th Thursday of each Month)*	Thursday	23	9:30 a.m.	4th Floor Conf. Room

AUGUST 2009

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**5**	**9:45 a.m.**	**Board Room**
Board of Directors Climate Protection Committee ***(Meets 2nd Thursday each Month)***	**Thursday**	**13**	**9:30 a.m.**	**4th Floor Conf. Room**
Board of Directors Regular Meeting *(Meets 1st & 3rd Wednesday of each Month)*	**Wednesday**	**19**	**9:45 a.m.**	**Board Room**
Board of Directors Mobile Source Committee – *(Meets 4th Thursday of each Month)*	**Thursday**	**27**	**9:30 a.m.**	**4th Floor Conf. Room**

HL – 6/23/09 (2:55 p.m.)
P/Library/Forms/Calendar/Calendar/Moncal

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: July 1, 2009

Re: Commendations/Proclamations

RECOMMENDED ACTION:

Recognize employees who have completed milestone levels of twenty-five (25), thirty (30) and forty (40) years of service with the Air District during the past six months with certificates and pins.

BACKGROUND:

Annually, the Air District recognizes employees who have contributed incremental years of dedicated service to the Air District. Formally, the Board of Directors recognizes and presents service awards to employees who have completed twenty-five (25) years or more of service to the District.

From January, 2009 to June, 2009, there were four employees who completed twenty-five (25) years of service, one (1) employee who completed thirty (30) years and one (1) employee who completed forty (40) years of service with the Air District. A list of employees is attached.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mary Ann Goodley

Employee Recognition Awards

25 Years of Service

Steven Chin
Emmanuel Jimenez
Scott Lutz
Michelle Torres

30 Years of Service

Virginia Manalo

40 Years of Service

Tom Story

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: June 25, 2009

Re: Board of Directors' Draft Meeting Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Board of Directors Regular Meeting of June 3, 2009.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Regular Meeting of June 3, 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
June 3, 2009

DRAFT MINUTES

CALL TO ORDER: Chairperson Pamela Torliatt called the meeting to order at 9:50 a.m.

Roll Call: Chairperson Pamela Torliatt, Vice Chairperson Brad Wagenknecht, Secretary Tom Bates and Directors Harold Brown, Chris Daly, Susan Garner, John Gioia, Carole Groom, Scott Haggerty, Jennifer Hosterman, Yoriko Kishimoto, Carol Klatt, Eric Mar, Mark Ross, Michael Shimansky, James Spering, Gayle Uilkema, and Ken Yeager

Absent: Directors Dan Dunnigan, Liz Kniss, Nate Miley and Shirlee Zane

PLEDGE OF ALLEGIANCE: Judith Barish led the Pledge of Allegiance.

Public Comments:

Judith Barish, Healthy Air Coalition, voiced concern regarding Pacific Steel Casting's concentrations of toxins exceeding exposure levels and urged the Board to tighten its standards and regulations for existing and new facilities.

Joseph Guth, Legal Director, Science & Environmental Health Network, asked the District to update its risk levels and requested more stringent air quality regulations be adopted.

Pear Michaels, Healthy Air Coalition and Co-Founder of Mothers and Others, voiced concern regarding her child's hospitalization, monitoring of Pacific Steel Casting data, the complaint process, and inadequate regulations.

Sasha Barish spoke of Pacific Steel Casting's knowledge of when testing is done, requested that the District set better standards, and cited Berkeley's cancer rates.

Justin Garland, Global Community Monitor, spoke of air quality concerns and Pacific Steel Casting, requested the District make risk levels more stringent to 10 parts per million and hold workshops leading to development of more stringent regulations.

Carol Marsovic, Healthy Air Coalition, urged the Board to consider the health of the community, work with technical experts and asked for modifications to the District's inspection techniques and the complaint process.

Shirley Dean requested differentiating the pollution from freeways and Pacific Steel Casting, spoke of risk indexes of 12 other districts, requested having the highest possible standards, discussed PSC's modified use permit and asked for regular inspections to ensure compliance.

Mark Zoidis, voiced concerns regarding the USA Today article, Berkeley's air quality, weak environmental regulations and urged the Board to provide top stringency on the health risk index.

Chris Kroll, West Berkeley Alliance, referred to correspondence dated May 29 and questioned the District's response to the USA Today's article.

Josh Gutwill requested the District to make clean air a priority by lowering risk levels and voiced concern with Pacific Steel Casting's emissions.

Richard Sinkoff, Port of Oakland, provided the following update:

- Near term actions undertaken by the Port - short sea shipping, additional air quality monitoring, cold air ironing and joint initiatives relating to I-Bond funding;
- Port staff preparing comments for the West Oakland Truck study;
- Commissioners met and deliberated on the Comprehensive Truck Management Plan (CTMP). An amendment was proposed to ban all CARB non-compliance trucks which did not pass. Port Commissioners requested attorney analysis and return of the Plan on June 16, 2009;
- Trucker outreach for retrofit project is going well;
- Funding agreement has been executed and Port working on encumbering additional funds prior to the end of the fiscal year.

Chairperson Torliatt requested further update be provided at the next Port Ad Hoc Committee meeting. In addressing public comments regarding Pacific Steel Casting (PSC), Chairperson Torliatt reported the District's work in updating CEQA guidelines, review of cumulative impacts and how the District analyzes new and existing sources which impact neighborhoods. She acknowledged the work of community groups and their assertion that other air districts have more stringent policies and said the District will require support in order to move this work forward.

Executive Officer/APCO Jack Broadbent further clarified that several years ago the CARE program was initiated which highlighted communities having concentrations of stationary and mobile sources polluting neighborhoods. The work to date has brought the District to the point where it needs to bring forward mitigation strategies and development of a regulatory approach relative to existing facilities to address cumulative impacts and to lower risk thresholds. He briefly discussed threshold limits of other air districts, discussed those having industry-wide exceptions, said an update will be provided to the Stationary Source Committee in July, and the District will bring changes to existing rules and permitting requirements to the Board at the end of 2009.

Director Bates requested an update be provided to address the issue of nickel and manganese at Pacific Steel Casting and clarified that a response had been provided in response to USA Today's article. He discussed Pacific Steel Casting's odor plan as being the first in the nation, spoke of the facility's expenditure of $2 million for monitoring equipment, upgrades and improvements, and said community members and groups refuse to accept the data.

Mr. Broadbent agreed to return to the Stationary Source Committee with the District's complaint process, specific issues of, and the District response to, the USA Today article and the epidemiology

study. Directors also confirmed that the Health Officer recruitment will close on June 30th with an expectation for the position to be filled by the end of the summer.

CONSENT CALENDAR (Items 1-4):

1. Approval of Minutes of May 20, 2009 Regular Meeting and Budget Hearing;
2. Communications;
3. District Personnel on Out-of-State Business Travel;

Board Action: Director Brown made a motion to approve Consent Calendar Items 1, 2 and 3; Vice Chairperson Wagenknecht seconded the motion; carried unanimously without opposition.

COMMITTEE REPORTS AND RECOMMENDATIONS:

Report 4. **Personnel Committee Meeting**
May 27, 2009
Report given by Chairperson H. Brown

Discussion/Actions:
The Personnel Committee met without an established quorum of the Committee. The Committee conducted interviews of candidates to fill the Regular and Alternate Attorney Member Categories on the Air District's Hearing Board. It was the unanimous consensus of the Committee to recommend Board of Directors' approval to re-appoint Rolf Lindenhayn, Esq., and Valerie Armento, Esq., to the Attorney Regular and Alternate Member category, respectively, for a three-year term of office, effective June 4, 2009 through June 3, 2012.

Board Action: Director Brown made a motion to approve the report and recommendation of the Personnel Committee; Vice Chairperson Wagenknecht seconded the motion; carried unanimously without opposition.

Report 5. **Mobile Source Committee Meeting**
May 28, 2009
Report given by Chairperson S. Haggerty

April 30, 2009 Committee minutes approved.

Discussion/Actions:
The Committee then considered Carl Moyer Program Year 11 projects with proposed grant awards of over $100,000 and discussed cost effectiveness of projects. At the Committee's request, a breakdown of all projects and their funding categories by type, dollar amounts and by county, is at your places for informational purposes.

The Committee recommends Board of Directors' approval of Carl Moyer Program Year 11 projects with proposed grant awards over $100,000, and authorizing the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program Year 11 projects.

The Committee then considered approval for Air District participation in the 2009 California Air Resources Board (ARB) Lower Emission School Bus Retrofit Program (LESBP) funded by the State Diesel Emission Reduction Act (DERA). The Committee discussed financial incentives provided by the Lower Emission School Bus Retrofit Program, Proposition 1B funds allocated to date, the receipt

of $11 million in eligible project applications, and the expected receipt of $1.2 million. The Committee recommends Board of Directors' adoption of a resolution to authorize Air District participation in the 2009 California Air Resources Board (ARB) Lower Emission School Bus Retrofit Program, and authorizing the Executive Officer/APCO to execute the necessary agreements with ARB relating to the Air District's receipt of the 2009 Lower Emission School Bus Program Retrofit Funds.

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

Report 6. **Climate Protection Committee Meeting**
May 28, 2009
Report given by Chairperson Y. Kishimoto

April 17, 2009 Committee minutes approved.

Discussion/Actions:
The Committee received a debriefing of the 2009 Climate Action Leadership Summit held on May 4, 2009, noting that over 75 local governments were represented with over 430 attendees. The Committee reviewed goals of the Summit, direct action and tangible outcomes achieved and next steps which include launching a best practices website, development of an ISR, follow-up with individual facilitators, speakers and attendees and collaboration on SB 375 with ABAG and MTC.

The Committee then received an update on development of the ConocoPhillips GHG Mitigation Program. The District is expected to receive $4,443,025 by June 1, 2009. Funding will be available to eligible non-profit, private and public entities achieving verifiable, quantifiable reductions in GHG emissions in areas nearest to the ConocoPhillips refinery. Project categories include energy efficiency measures in existing buildings, "cool roofs" on existing buildings and/or "cool pavement", and new and renewable energy generation. The draft RFP will be presented to the Attorney General in July, the District will conduct and issue calls for projects by August 2009, and settlement funds must be expended by May 30, 2011.

Board Action: Director Kishimoto made a motion that the Board of Directors approve the report of the Climate Protection Committee; seconded by Director Shimansky; unanimously approved without objection.

Report 7. **Budget and Finance Committee Meeting**
June 1, 2009
Report given by Chairperson C. Daly

May 6, 2009 Committee minutes approved.

Discussion/Actions:
The Committee received the financial report for the third quarter for Fiscal Year 2008/2009 and a review of financial trends, challenges and risks over the next three years, and investment and fund balances.

The Committee considered adoption of San Mateo County's Pooled Fund Investment Policy, reviewed investment goals and exploration of potentially moving its treasury to the custody of another county within the Air District's jurisdiction.

The Committee recommends that the Board of Directors, by Board resolution, adopt the County of San Mateo's Pooled Fund Investment Policy, including all subsequent policy revisions, and directed staff to return to a subsequent Budget and Finance Committee meeting with a recommended strategy for potentially moving its treasury to the custody of another county within the Air District's jurisdiction.

The Committee then considered a recommendation to transmit $2,000,000 to CalPERS for Other-Than-Pension-Post-Benefits (OPEB) upon Board of Directors' approval of the FYE 2010 Budget.

The Committee recommends that upon Board of Directors' approval of the FYE 2010 Budget, $2,000,000 in OPEB funds be transmitted to Cal PERS before the close of the current fiscal year.

Board Action: Director Daly made a motion that the Board of Directors approve the report and recommendations of the Budget and Finance Committee; seconded by Director Shinansky; unanimously approved without objection.

Director Yeager confirmed with Mr. McKay that the District will base its criteria in potentially moving its treasury to the custody of another county within the Air District's jurisdiction based upon the ability to do electronic transfers, familiarity of the County in dealing with funds the size of the District's, and the overall availability of the County to the Air District.

PUBLIC HEARING:

Final Public Hearing to Consider Adoption of the Air District's Proposed Budget for Fiscal Year Ending 2010 – *Jeffrey McKay, Deputy APCO*

FYE: 2010 Budget Highlights and Overall Direction

- The FYE 2010 Budget is balanced with fee increases between 0% - 15%
- County property tax revenue is decreased by 3%
- Fee increases offset:
  - Decrease in County Revenue
  - COLA of 3.3%
- No FTE increases

Continuing Initiatives

- The Budget continues to support core programs and initiatives:
  - CARE and Related Programs
  - Spare the Air Summer/Winter Programs
  - Woodsmoke Program
  - Climate Protection Program
  - Clean Air Communities Initiative

Process

- Second of two public hearings required for budget adoption
- Recommendation that the Board adopt the proposed Budget
- In-depth review is available

Director Comments/Questions:
Shimansky: Questioned the projected 3% decrease in property tax. Mr. McKay noted that the Budget did not address potential State take-a-ways and confirmed that staff contacted each county's jurisdiction to project property tax reductions, which averaged out to be an overall decrease of 3%.
Bates: Requested continual monitoring of the Budget and a two-year budget, stating that $20 million in property tax and subvention of $1.9 million could be taken by the State. Mr. McKay responded that the two-year budget option had been discussed in the Budget & Finance Committee meeting and was not supported, and confirmed that staff would continue to monitor the Budget.

Chairperson Torliatt opened the public hearing. There were no public comments, and the public hearing was closed.

Board Action: Director Bates made a motion to adopt the Resolution approving the Budget for the Fiscal Year Ending June 30, 2010 (FY 2009-2010) and Various Budget Related Actions; Director Daly seconded the motion; carried unanimously without opposition.

CLOSED SESSION:
The Board of Directors adjourned to Closed Session at 10:58 a.m.

Potential Litigation (Government Code Section 54956(b) and 54956.9(c)) - *Pursuant to Government Code Section 54956.(b) and 54956.9(c), the Board of Directors met in closed session to discuss potential litigation.*

OPEN SESSION
The Board of Directors reconvened in Open Session at 11:45 p.m.; there was no reportable action taken in Closed Session.

OTHER BUSINESS:
Report of Executive Officer/APCO:
- 2009 Ozone Exceedances through June 2, 2009:
  - 3 occurred - National 8-hour (75 ppb), State 8-hour (70 ppb) and State 1-hour (95 ppb).
- Presented Air District's Annual Report
- Scheduled public hearing on Architectural Coating Rule – July 1, 2009

Chairperson's Report: Chairperson Torliatt canceled the June 17th Board meeting; next meeting to be held on July 1, 2009.

Board Member Comments: Director Bates announced the cancellation of the June 11, 2009 Climate Protection Committee and Legislative Committee meetings.

Time and Place of Next Meeting: Regular Meeting - Wednesday, July 1, 2009 - 939 Ellis Street, San Francisco, CA 94109

Adjournment: Meeting adjourned at 11:48 p.m.

Lisa Harper
Clerk of the Boards

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: May 26, 2009

Re: Board Communications Received from June 3, 2009 through June 29, 2009

RECOMMENDED ACTION:

Receive and file.

DISCUSSION

A list of Communications directed to the Board of Directors received by the Air District from June 3, 2009 through June 29, 2009, if any, will be at each Board member's place at the July 1, 2009, Regular Board meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

BAY AREA AIR QUALITY MANGEMENT DISTRICT
Memorandum

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

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 11, 2009

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

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

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

The out-of-state business travel summarized below covers the period from June 1 – June 30, 2009. Out-of-state travel is reported in the month following travel completion.

DISCUSSION

Eric Stevenson, Air Monitoring Manager, attended NACAA Air Monitoring Steering Committee Meeting in Baltimore, MD June 1 – 3, 2009.

Jack Broadbent, Executive Office / APCO, attended A&WMA Annual Conference & Exhibition in Detroit, MI June 16 - 19, 2009.

Phil Martien, Community Air Risk Evaluation Manager, attended A&WMA Annual Conference & Exhibition in Detroit, MI June 15 - 19, 2009.

Saffet Tanrikulu, Research & Modeling Manager, attended the US EPA's Photochemical Modeling Workshop in Baltimore, MD June 15 – 18, 2009.

Henry Hilken, Planning & Research Director, attended A&WMA Annual Conference & Exhibition in Detroit, MI June 15 - 19, 2009.

Barbara Coler, Compliance & Operations Manager, attended A&WMA Annual Conference & Exhibition in Detroit, MI June 15 - 19, 2009.

Jack M. Colbourn, Strategic Incentives Director, attended A&WMA Annual Conference & Exhibition in Detroit, MI June 16 - 19, 2009.

Gary Kendall, Technical Services Director, attended A&WMA Annual Conference & Exhibition in Detroit, MI June 14 - 18, 2009.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Linda J. Serdahl, CPA, CFE
Reviewed by: Jeffrey M. McKay

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: June 2, 2009

RE: Quarterly Report of the Executive Office: April 1 – June 30, 2009

RECOMMENDED ACTION

This report is provided for information only.

DISCUSSION

Listed below is the status of minutes for the Board of Directors, Advisory Council- and activities of the Hearing Board for the second quarter of 2009:

Board of Directors

Meeting Type	Meeting Date	Status of Minutes
Regular Meeting	April 1	Minutes Approved
Regular Meeting	April 15	Minutes Approved
Regular Meeting	May 6	Minutes Approved
Regular Meeting	May 20	Minutes Approved
Regular Meeting	June 3	Minutes Completed/Pending Approval
Budget Hearing	May 20	Minutes Approved
Climate Protection Committee	April 17	Minutes Approved
Climate Protection Committee	May 28	Minutes Completed/Pending Approval
Stationary Source Committee	April 20	Minutes Completed/Pending Approval
Legislative Committee	April 15	Minutes Completed/Pending Approval
Budget & Finance Committee	April 29	Minutes Approved
Budget & Finance Committee	May 6	Minutes Approved
Budget & Finance Committee	June 1	Minutes Completed/Pending Approval
Mobile Source Committee	April 30	Minutes Approved
Mobile Source Committee	May 28	Minutes Completed/Pending Approval
Mobile Source Committee	June 25	Minutes Completed/Pending Approval
Public Outreach Committee	April 2	Minutes Approved
Public Outreach Committee	May 7	Minutes Completed/Pending Approval
Executive Committee	May 18	Minutes Completed/Pending Approval
Executive Committee	June 29	Meeting Scheduled
Personnel Committee	May 27	Minutes Completed/Pending Approval

Advisory Council

Meeting Type	Meeting Date	Status of Minutes
Regular Meeting	April 8	Minutes Approved
Regular Meeting	May 13	Minutes Completed/Pending Approval

Hearing Board

1. During the Period April-June 2009, the Hearing Board processed and filed a total of two (2) Applications: One (1) Regular Variance and one (1) Short-Term Variance. Both hearings were subsequently withdrawn and hearings were not held. Also processed was a hearing notice and filings for the two variance applications.

2. The Hearing Board received a request from the APCO to close an Accusation docket, which was approved by the Hearing Board. The matter is in small claims court as a result of the respondent not paying outstanding civil penalties.

3. One (1) Status Report was filed on an Appeal. One (1) Appeal scheduled to be heard in the second quarter was requested to be continued by the Appellant, which was approved by the Hearing Board.

4. The Hearing Board held an Election of Officers during the second quarter. Thomas M. Dailey, M.D. was re-appointed as Chair, and Christian Colline, P.E., was re-appointed as Vice Chair.

5. A total of $3,224.42 was collected as Hearing Board fees (applications and noticing) during the second quarter of 2009.

Respectfully submitted,

Jack P. Broadbent

Jack P. Broadbent
Executive Officer/APCO

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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: June 24, 2009

Re: Consideration of Authorization to Issue Purchase Order in Excess of $70,000 Pursuant to Administrative Code Division II Fiscal Policies and Procedures Section 4.3 Contract Limitations

RECOMMENDED ACTION:

Authorize the Executive Officer/APCO to issue a purchase order for Residential Wood Burning Status Phone Number (1-877-4NO-BURN), Wood Smoke Complaint System, Customer Service and Data System in an amount not to exceed $125,000.

BACKGROUND

On July 9, 2008, the Board adopted Regulation 6, Rule 3: Wood-burning Devices to reduce the harmful particulate emissions that come from wood smoke. To increase public awareness on the health effects of woodsmoke, the District established a toll-free phone number, also known as the 877-4NO-BURN line to allow the public to check on the residential wood burning status for all existing and future woodsmoke curtailment programs. Additionally, the phone number has an option to allow for District residents to file woodsmoke complaints. For the upcoming WSTA season, the District is planning to expand the capabilities of the number to provide multiple languages, to enhance the woodsmoke complaint reporting and data system, to allow for more efficient complaint management, and to provide for automated forwarding of some calls to other, out-of-District programs.

DISCUSSION

Compliance and Enforcement Division (CED) staff worked with the Information Systems Division (ISD) and Communications and Outreach Office (COO) to research options to expand the current toll-free 877-4NO-BURN line to provide multiple languages, to enhance the woodsmoke complaint reporting and data system, to allow for more efficient complaint management, and to provided for automated forwarding to out of District programs. Staff researched expanding the current phone system, purchasing an integrated voice response system or using an external vendor to set up a call center type system. District staff determined the current phone system and infrastructure did not have the capability to route calls outside the District, transfer woodsmoke complaint calls and handle high call volumes. In addition, staff determined the cost of purchasing and maintaining our own system was cost prohibitive. Staff is recommending that the District use an external vendor call center system with an automated interface for handling woodsmoke complaints.

Staff first consulted with existing national call centers for possible solutions and vendors to expand the phone system. Staff then proceeded to contact vendors in related fields: Communication Strategies (the District's current consultant for its telecommunications system): AT&T; Contactual; Comcate, Inc.; and EcoInteractive, Inc. Staff consulted with these vendors regarding the system requirements which would include enhancing the toll-free 4NO-BURN phone system with a complaint/customer service component and a woodsmoke complaint management data system. No vendor was able to provide a complete solution meeting all the requirements except EcoInteractive.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

The estimated annual costs for the enhancement of the 1-877-4NO-BURN line are $125,000. This enhancement is a budgeted item in the Fiscal Year ending 2010 budget under Program 402 Compliance Assistance.

Respectfully submitted,

Jack P. Broadbent

Jack Broadbent
Executive Officer/Air Pollution Control Officer

Prepared by: Paul Hibser
Reviewed by: Kelly Wee

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: June 11, 2009

Re: Consideration and Approval of an Amendment to a Contract for the West Oakland Measurement Study

RECOMMENDED ACTION

Authorize the Executive Officer/APCO to execute a contract amendment with Desert Research Institute (DRI) in an amount not to exceed $112,300.

BACKGROUND

The California Air Resources Board, in collaboration with the District and the Port of Oakland, completed a health risk assessment that showed diesel particulate matter (PM) concentrations, largely produced from heavy duty trucks on roads and freeways, are roughly three times higher in West Oakland than the average background diesel PM concentrations in the Bay Area. The District's Board of Directors approved a contract with Desert Research Institute (DRI) in July 2008 to conduct a limited measurement study in West Oakland that would provide an independent assessment of the health risk assessment findings and also expand District staff expertise in community-scale measurement techniques.

Staff is proposing to expand the study to include wintertime measurements in West Oakland to understand the seasonal sources of particulate matter. The study will evaluate the contribution of diesel emissions with respect to other particulate sources such as wood smoke and cooking that may be more dominant in wintertime conditions.

DISCUSSION

The purpose of the study is to collect detailed chemical and particulate matter data in fall/winter 2009/2010 to identify seasonal variations of sources of toxic air contaminants and evaluate and refine modeling. Although the initial focus of the study is on West Oakland, the study and its findings will be useful throughout the Bay Area by:

- Evaluating and refining local-scale model predictions;
- Expanding staff expertise in community-scale measurement techniques to assess spatial variations in air toxic concentrations and identify hot-spot emission sources;

- Estimating the contribution of diesel PM, wood smoke, and cooking emissions to ambient PM levels in the Bay Area;
- Verifying high emission sources and developing mitigation measures;
- Developing baseline conditions for assessing the effectiveness of mitigation measures; and
- Identifying surrogate compounds for quantifying diesel PM emissions that can be applied to West Oakland and other Bay Area communities.

SCOPE OF WORK

The proposed study consists of three main elements.

Task 1 Collect and analyze measurements at fixed locations in West Oakland in the fall/winter of 2009/10.

Task 2 Conduct a wintertime source attribution study to evaluate the chemical speciation of PM and determine if carbon black is an appropriate surrogate for diesel PM in the Bay Area.

Task 3 Develop standard operating procedures manual for operating all of the equipment in the mobile sampling van and install one minor piece of equipment to the van.

The monitoring data collected from the fixed sampling locations will be used to characterize pollutant levels in emission hot spots and other "microenvironments" for comparison with the modeling for the West Oakland health risk assessment. The results may then be used to refine population exposures and associated risks. The study analysis and findings will be documented in a report. After completion of this study, staff plans to use the mobile sampling van in other communities for characterizing baseline conditions, identifying the sources of diesel PM and other pollutants, assisting county health departments to characterize hot spot emission sources, and helping to design effective mitigation measures.

CONTRACTOR QUALIFICATIONS

District staff is proposing to amend the contract with DRI to conduct the wintertime measurement study. DRI is uniquely qualified for this work because of their experience conducting similar projects throughout California. DRI is a nonprofit research institution affiliated with the University of Nevada Reno that specializes in air toxics and mobile field sampling. They have recently published articles on source apportionment methods for determining contributions of gasoline and diesel exhaust to ambient soot as well as assessments of air toxics near roads and freeways. No other consultant firms or educational institutions have conducted as many studies on vehicle exhaust and source attributions. DRI and the University of Nevada Reno have developed a mini photoacoustic instrument for measuring black carbon emissions which is not commercially available from any other vendor and was recently acquired by the District and installed in the mobile sampling van. DRI is currently using the instrument in a similar measurement study of the Southern California air basin near the Port of Long Beach and Port of Los Angeles for the American Petroleum Institute. DRI

also has outfitted its own mobile sampling van and used the van for the Southern California study.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funds for this study are included in the District's Community Air Risk Evaluation (CARE) program budget for FY 2008/2009.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Virginia Lau
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Torliatt and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 11, 2009

Re: Set Public Hearing for August 5, 2009 to Consider Proposed Amendments to Regulation 8, Rule 32: Wood Products Coatings; Manual of Procedures, Volume I, Number 6: Emissions Averaging Procedure; and Adoption of a CEQA Negative Declaration

RECOMMENDED ACTION:

Set a Public Hearing for August 5, 2009 to consider proposed amendments to Regulation 8, Rule 32: Wood Products Coatings; and to the Manual of Procedures, Volume I: Enforcement Procedures, Number 6: Emissions Averaging Procedure; and Adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA).

BACKGROUND

Control Measure SS-5 in the 2005 Ozone Strategy proposes to reduce volatile organic compound (VOC) emissions from wood products coatings. Regulation 8, Rule 32 limits volatile organic compound (VOC) emissions from the wood products manufacturing industry by setting standards for application techniques and by limiting the amount of VOC that can be in coatings and clean-up solvents. Wood products includes furniture, bathroom vanities, kitchen cabinets, picture frames, outdoor speakers, architectural millwork and other wood products. Staff developed amendments and conducted a public workshop on May 18, 2009.

DISCUSSION

Proposed amendments to Regulation 8, Rule 3 would:

- Reduce VOC limits for some categories of wood products, effective July 1, 2010;
- Set a VOC content for solvents used in surface preparation and reduce the VOC content of clean-up solvent;
- Revise the way coatings are classified and require VOC labeling requirements for coatings sold after July 1, 2010.
- Make other changes to enhance and clarify the rule and enhance staff's ability to verify compliance and enforce Regulation 8-32.

In addition, proposed amendments to the Manual of Procedures, Volume I, Number 6 update the Emissions Averaging Procedure for consistency with the rule and EPA policies.

Pursuant to the California Environmental Quality Act (Public Resources Code § 21000 et seq.), an initial study for the proposed rule has been conducted, concluding that the proposed rule would not have significant adverse environmental impacts. Notice is hereby given that the District intends to adopt a negative declaration for the rule pursuant to Public Resources Code section 21080(c) and CEQA Guidelines section 15070 et seq.

A public hearing notice, proposed amendments to Regulation 8, Rule 32: Wood Products Coatings; Manual of Procedures, Volume I, Number 6: Emissions Averaging Procedure; the CEQA initial study and Negative Declaration; a socioeconomic analysis; and a staff report are available by request and will be posted on the District's website at http://www.baaqmd.gov/pln/ruledev/regulatory_public_hearings.htm.

BUDGET CONSIDERATION/FINANCIAL IMPACTS

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Guy Gimlen
Reviewed by: Henry Hilken

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: June 26, 2009

Re: Report of the Mobile Source Committee Meeting of June 25, 2009

RECOMMENDED ACTIONS

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

A. Carl Moyer Program Off-Road Equipment Replacement Program:

1. Approve District implementation of an off-road equipment replacement program component of the Carl Moyer Program; and
2. Authorize the Executive Officer/APCO to execute contracts with vendors and dismantlers to implement the Carl Moyer Program Off-Road Equipment Replacement Program.

B. Carl Moyer Program Year 11 Projects with Proposed Grant Awards over $100,000:

1. Approve Carl Moyer Program Year 11 projects with proposed grant awards over $100,000; and
2. Authorize the Executive Officer/APCO to enter into agreements for the recommended Carl Moyer Program Year 11 projects.

C. FY 2009/2010 Bicycle Facility Program: Annual Report for FY 2008/2009 and Proposed Revisions to Policies and Adoption of Programs for FY 2009/2010:

1. Receive and file the Annual Report for the Bicycle Facility Program for Fiscal Year 2008/2009;
2. Approve the proposed Bicycle Facility Program Policies, presented in Attachment B, for use in Fiscal Year 2009/2010 and in subsequent years; and
3. Approve the allocation of $600,000 in TFCA Regional Funds to the Bicycle Facility Program for Fiscal Year 2009/2010, and the authorization for the Executive Officer/APCO to execute funding agreements in accordance with the Board-approved Bicycle Facility Program Policies.

BACKGROUND

The Mobile Source Committee met on Thursday, June 25, 2009. The Committee considered and received the following reports and recommendations:

A. Consideration of Implementation of a Carl Moyer Program Off-Road Equipment Replacement Program;

B. Carl Moyer Program Year 11 projects with proposed grant awards over $100,000; and

C. Consideration of FY 2009/2010 Bicycle Facility Program: Annual Report for FY 2008/2009 and Proposed Revisions to Policies and Adoption of Program for FY 2009/2010.

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

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

BUDGET CONSIDERATION/FINANCIAL IMPACT

A. None. The CMP distributes "pass-through" funds from CARB to private companies and public agencies on an invoice basis. Grant funds awarded do not directly impact the Air District's budget.

B. None. The Air District distributes "pass-through" funds from ARB to public agencies and private entities on a reimbursement basis. Therefore, the grant funds awarded do not directly impact the Air District's budget.

C. None. Approval of the recommended policies and allocation will have no impact on the Air District's budget. TFCA revenues come from a dedicated external funding source. TFCA allocations do not impact the Air District's general fund or operating budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Lisa Harper
Reviewed by: Mary Ann Goodley

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Haggerty and Members of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 18, 2009

Re: Consideration of Implementation of a Carl Moyer Program Off-Road Equipment Replacement Program

RECOMMENDED ACTION

Staff requests the Committee recommend the Board of Directors:

1. Approve District implementation of an off-road equipment replacement program component of the Carl Moyer Program.
2. Authorize the Executive Officer/ APCO to execute contracts with vendors and dismantlers to implement the Carl Moyer Program off-road equipment replacement program.

BACKGROUND

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

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

- Projects eligible for grants under the CMP;
- New purchase of clean school buses;
- Accelerated vehicle retirement or repair program; and
- Projects to reduce emissions from previously unregulated agricultural sources.

On February 4, 2009 the District Board of Directors authorized District participation in Year 11 of the CMP, and authorized the Executive Office/ APCO to execute Grant Agreements and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to $100,000.

DISCUSSION

The off-road equipment replacement program will reduce emissions by funding the replacement of old, high polluting equipment with newer, cleaner equipment earlier than would have been expected through normal attrition. The off-road equipment replacement component to the CMP was established by ARB in their 2008 CMP Guidelines, because traditionally-funded repower projects are not feasible for some equipment types and for others, the diminished value of the old equipment does not justify investing significant funds for engine replacement. The District plans to fund off-road equipment replacement projects with CMP and MSIF funds, and will evaluate projects in the same manner as the other CMP equipment categories.

Funds may be used to fund up to 80% of the cost of the replacement equipment and potentially 100% of a verified diesel retrofit. Eligible projects must meet all of the requirements of the ARB CMP guidelines, including cost-effectiveness. Some of the requirements for eligible equipment include, but are not limited to:

- The equipment being owned and operated by the applicant for the previous two years.
- The equipment being powered by an uncontrolled diesel engine greater than or equal to 25 hp.
- The project not being required by any local, state, and/or federal rule, regulation, or other legally binding requirement to reduce emissions.
- The replaced equipment being destroyed by a District-approved party once the new equipment enters service.

On April 22, 2009 staff submitted an initial implementation plan to ARB to establish the off-road equipment replacement program with the District. Staff is currently addressing ARB comments in an attempt to finalize the plan. As was the case with the recently-approved CMP Voucher Incentive Program, the off-road equipment replacement program requires the District to enter into agreements with equipment dealers and dismantlers in order to implement this program. Staff requests the committee: (1) Approve District implementation of an off-road equipment replacement program component to the Carl Moyer Program, and (2) Authorize the Executive Officer/ APCO to execute contracts with vendors and dismantlers to implement the Carl Moyer Program off-road equipment replacement program.

BUDGET CONSIDERATION / FINANCIAL IMPACT

The CMP distributes "pass-through" funds from CARB to private companies and public agencies on an invoice basis.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Anthony Fournier
Reviewed by: Jack M. Colbourn

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Haggerty and Members of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 18, 2009

Re: Consideration of Approval for Carl Moyer Program Year 11 Projects with Proposed Grant Awards Over $100,000

RECOMMENDATION

Request the Committee recommend the Air District Board of Directors:

1. Approve Carl Moyer Program Year 11 projects with proposed grant awards over $100,000.
2. Authorize the Executive Officer/ APCO to enter into agreements for the recommended Carl Moyer Program Year 11 projects.

BACKGROUND

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

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

- Projects eligible for grants under the CMP;
- New purchase of clean school buses;
- Accelerated vehicle retirement or repair program; and
- Projects to reduce emissions from previously unregulated agricultural sources.

On February 4, 2009 the Air District Board of Directors authorized Air District participation in Year 11 of the CMP, and authorized the Executive Office/ APCO to execute Grant Agreements

and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to $100,000. Projects with grant award amounts over $100,000 will be brought to the Committee for consideration at least on a quarterly basis.

Air District staff began soliciting Year 11 CMP/ MSIF grant applications on April 15, 2009. The Air District expects to have approximately $20 million available from a combination of CMP funds and MSIF revenues for eligible projects under this solicitation. Staff has developed and executed an extensive outreach campaign and has been working with equipment vendors to assist Air District staff in outreach to their customers to encourage the submittal of project applications. Project applications for this round of funding are being evaluated, and selected for funding on a first-come, first-served basis. Staff reviews and evaluates the Year 11 CMP grant applications based upon:

- The 2008 CMP guidelines issued by ARB on April 21, 2008
- The Air District's CMP Year 11 procedures approved by ARB
- Applicable regulations
- The Air District's AB 1390 methodology

On June 3, 2009 the Air District Board of Directors approved 13 CMP eligible projects which had individual grant awards over $100,000. Approximately 95% of the $5,789,626.00 allocated by the Board of Directors will be for projects that reduce emissions in impacted communities.

DISCUSSION

As of June 12, 2009 the Air District had received 59 CMP grant applications requesting incentive funds for potential emission reduction projects. Of the applications that have been evaluated between May 11, 2009 and June 12, 2009, 14 eligible projects have individual grant awards over $100,000. Approximately 93% of the funds recommended for allocation will be for projects that reduce emissions in impacted communities, as summarized in Table 1. Attachment 1 lists 40 engines that staff recommends be awarded grants for an aggregate of $6,844,216.00 in funding, using a combination of CMP funds and MSIF revenues All of the applicants listed in Attachment 1 have projects with proposed individual grant awards greater than $100,000.

Table 1: Recommended CMP Yr 11 grant awards by AB1390 designation *

Designation	Number of engines	Total grant awards	Lifetime emissions reduction (tons)		
			NOx	ROG	PM
AB1390 **	30	$6,385,675.00	338.44	10.43	54.26
Not AB1390	10	$458,541.00	27.92	3.44	0.99
Totals	**40**	**$6,844,216.00**	**366.36**	**13.87**	**55.25**

** Eligible CMP grant awards greater than $100,000 between 5/11/09 and 6/12/09*
*** Projects reducing emissions in the six most highly impacted communities: Concord, Richmond/ San Pablo, Western Alameda County, San Jose, Redwood City/ East Palo Alto, and Eastern San Francisco.*

Attachment 2 to this staff report lists all of the eligible projects (Table 2) that have been received by the Air District as of June 12, 2009, and summarizes the allocation of funding by equipment

category (Figure 1), and county (Table 2). Staff requests the Committee recommend the Air District's Board of Directors approve CMP Year 11 projects with proposed grant awards over $100,000 as listed in Attachment 1, and authorize the Executive Officer/ APCO to enter into agreements for these projects.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District distributes "pass-through" funds from ARB to public agencies and private entities on a reimbursement basis. Therefore, the grant funds awarded do not directly impact the Air District's budget.

Respectfully submitted,

Jeff McKay

for Jack P. Broadbent
Executive Director/APCO

Prepared by: Anthony Fournier
Reviewed by: Jack M. Colbourn

Attachment 1: Projects with individual grant awards greater than $100,000
Attachment 2: Summary of all eligible projects as of June 12, 2009

Attachment 1: BAAQMD Year 11 Carl Moyer Program/ MSIF projects with grant awards greater than $100k (Evaluated between 5/11/09 and 6/12/09)

1 **Project #: 11MOY3** **Applicant Name:** *Gallo Family Vineyards* 6 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Hoppman 2	Agriculture	Repower	$7,222.42	$30,510.00	0.859	0.103	0.028	Not AB1390
Nicholini 2	Agriculture	Repower	$7,222.42	$30,510.00	0.859	0.103	0.028	Not AB1390
Hoppman 1	Agriculture	Repower	$7,222.42	$30,510.00	0.859	0.103	0.028	Not AB1390
Nicholini 1	Agriculture	Repower	$7,222.42	$30,510.00	0.859	0.103	0.028	Not AB1390
Gilson 2	Agriculture	Repower	$7,222.42	$30,510.00	0.859	0.103	0.028	Not AB1390
Gilson 1	Agriculture	Repower	$7,222.42	$30,510.00	0.859	0.103	0.028	Not AB1390
			Project Totals	$183,060.00	5.151	0.620	0.168	

2 **Project #: 11MOY13** **Applicant Name:** *Fly Rose Marine, Inc.* 3 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Madeline-aux-1	Marine	Repower	$13,845.40	$36,380.00	0.322	0.020	0.012	AB1390
Madeline-aux-2	Marine	Repower	$15,999.42	$20,162.00	0.053	0.042	0.009	AB1390
Madeline-main-1	Marine	Repower	$15,050.13	$170,919.00	2.543	0.024	0.076	AB1390
			Project Totals	$227,461.00	2.918	0.085	0.098	

3 **Project #: 11MOY17** **Applicant Name:** *David Underwood* 2 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
PF-65-main-1	Marine	Repower	$12,714.17	$115,301.00	1.137	0.037	0.043	AB1390
Suzi D-main-1	Marine	Repower	$14,609.69	$66,859.00	0.420	0.018	0.016	AB1390
			Project Totals	$182,160.00	1.557	0.055	0.059	

4	Project #: 11MOY26	Applicant Name: State of California, State Parks Depertment	2 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Ayala-main-1	Marine	Repower	$15,700.57	$82,949.00	0.521	0.012	0.018	AB1390
Ayala-main-2	Marine	Repower	$15,700.57	$82,949.00	0.521	0.012	0.018	AB1390
			Project Totals	$165,898.00	1.041	0.023	0.035	

5	Project #: 11MOY27	Applicant Name: City and County of San Francisco, San Francisco Police Department	2 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
SF Marine 1-main-2	Marine	Repower	$12,922.57	$89,481.00	1.127	-0.017	0.040	AB1390
SF Marine 1-main-1	Marine	Repower	$12,922.57	$89,481.00	1.127	-0.017	0.040	AB1390
			Project Totals	$178,962.00	2.253	-0.034	0.079	

6	Project #: 11MOY33	Applicant Name: Brian Guiles	2 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Flying Fish-main-1	Marine	Repower	$14,544.29	$72,252.00	0.664	-0.004	0.023	AB1390
Flying Fish-main-2	Marine	Repower	$14,544.29	$72,252.00	0.664	-0.004	0.023	AB1390
			Project Totals	$144,504.00	1.329	-0.007	0.046	

7	Project #: 11MOY34	Applicant Name: Bodega Bay Sportfishers, Inc.	2 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
New Sea Angler-main-1	Marine	Repower	$13,177.00	$104,528.00	1.322	0.020	0.042	AB1390
New Sea Angler-main-2	Marine	Repower	$13,177.00	$104,528.00	1.322	0.020	0.042	AB1390
			Project Totals	$209,056.00	2.644	0.040	0.084	

8	Project #: 11MOY36	Applicant Name: Geoff and David Bettencourt						2 engines
Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Mariah Lee-main-1	Marine	Repower	$7,456.68	$87,458.00	2.511	0.085	0.081	AB1390
Mariah Lee-aux-1	Marine	Repower	$15,537.60	$18,936.00	0.159	0.031	0.012	AB1390
			Project Totals	$106,394.00	2.670	0.116	0.094	

9	Project #: 11MOY40	Applicant Name: James Gregory Smith						1 engine
Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Happy Hooker-main-1	Marine	Repower	$13,106.83	$102,984.00	1.685	-0.001	0.057	AB1390
			Project Totals	$102,984.00	1.685	-0.001	0.057	

10	Project #: 11MOY41	Applicant Name: Bay Marine Services, Inc.						2 engines
Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Eaglet-main-1	Marine	Repower	$6,431.67	$99,733.00	3.434	0.098	0.103	AB1390
Eaglet-main-2	Marine	Repower	$6,431.67	$99,733.00	3.434	0.098	0.103	AB1390
			Project Totals	$199,466.00	6.868	0.196	0.206	

11	Project #: 11MOY44	Applicant Name: California Department of Transportation						5 engines
Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
CDTX 2007	Locomotive	Remanufacture kit	$12,367.03	$521,802.00	9.818	0.232	0.079	AB1390
CDTX 2003	Locomotive	Remanufacture kit	$12,367.03	$521,802.00	9.818	0.232	0.079	AB1390
CDTX 2006	Locomotive	Remanufacture kit	$12,367.03	$521,802.00	9.818	0.232	0.079	AB1390
CDTX 2013	Locomotive	Remanufacture kit	$12,367.03	$521,802.00	9.818	0.232	0.079	AB1390
CDTX 2004	Locomotive	Remanufacture kit	$12,367.03	$521,802.00	9.818	0.232	0.079	AB1390

			Project Totals	$2,609,010.00	49.088	1.158	0.394

12 Project #: 11MOY46 **Applicant Name:** *APL Maritime Services, Ltd.* 3 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
Vessel-3	Marine	Retrofit only	$15,998.00	$1,003,377.00	7.570	0.270	4.140	AB1390
Vessel-2	Marine	Retrofit only	$15,998.00	$532,347.00	7.570	0.270	4.140	AB1390
Vessel-1	Marine	Retrofit only	$15,998.00	$532,347.00	7.570	0.270	4.140	AB1390
			Project Totals	$2,068,071.00	22.710	0.810	12.420	

13 Project #: 11MOY51 **Applicant Name:** *Stroer & Graff, Inc.* 4 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
C-7	Off-Road	Repower only	$7,273.24	$49,150.00	1.383	0.171	0.044	AB1390
C-9	Off-Road	Repower only	$5,875.61	$49,150.00	1.534	0.211	0.063	AB1390
C-11	Off-Road	Repower only	$10,980.42	$44,475.00	0.742	0.102	0.031	AB1390
C-12	Off-Road	Repower only	$7,421.19	$48,934.00	1.348	0.166	0.043	AB1390
			Project Totals	$191,709.00	5.007	0.650	0.181	

14 Project #: 11MOY52 **Applicant Name:** *Salt River Construction Corp.* 4 engines

Unit #	Equipment category	Project type	Cost-effectiveness	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)	AB1390 Designation
8OR	Off-Road	Repower only	$13,782.94	$45,655.00	0.294	0.056	0.020	Not AB1390
7OR	Off-Road	Repower+ retrofit	$15,998.86	$66,915.00	0.591	0.043	0.015	Not AB1390
6OR	Off-Road	Repower only	$11,005.33	$78,855.00	1.477	0.196	0.045	Not AB1390
5OR	Off-Road	Repower+ retrofit	$11,597.99	$84,056.00	1.206	0.166	0.062	Not AB1390
			Project Totals	$275,481.00	3.568	0.461	0.142	

Summary:	Projects	Engines	Proposed award	NOx (TPY)	ROG (TPY)	PM (TPY)
	14	40	$6,844,216.00	108.490	4.172	14.063

Attachment 2: Summary of all CMP Yr 11/ MSIF approved/ eligible projects (4/15/09 to 6/12/09)

Table 2: List of all eligible/ approved projects

Project #	Equipment category	# of engines	Proposed contract award	Applicant name	NOx (TPY)	ROG (TPY)	PM (TPY)	Board approval date	County
11MOY1	Marine	2	$ 274,156.00	Robert S. Tuckey	3.435	0.065	0.101	03-Jun-09	San Mateo
11MOY2	Marine	2	$ 149,358.00	Blue and Gold Fleet LP	5.368	0.148	0.178	03-Jun-09	San Francisco
11MOY3	Agriculture	6	$ 183,060.00	Gallo Family Vineyards	5.151	0.620	0.168	01-Jul-09	Sonoma, Napa
11MOY5	Marine	2	$ 165,950.00	Kelli Dickinson	3.306	0.042	0.114	03-Jun-09	Solano
11MOY6	Marine	2	$ 152,092.00	Jaqueline G. Douglas	1.296	-0.014	0.045	03-Jun-09	San Francisco
11MOY7	Marine	1	$ 72,300.00	Frank A. Rescino	2.295	0.038	0.079	APCO	San Francisco
11MOY8	Marine	2	$ 137,500.00	Chuck Louie	1.883	0.033	0.064	03-Jun-09	San Francisco
11MOY9	Marine	1	$ 103,830.00	Erik Anfinson	0.562	-0.004	0.019	03-Jun-09	Marin
11MOY10	Marine	2	$ 91,004.00	Golden Gate Bridge Highway and Transportation Dist	0.828	0.003	0.022	APCO	San Francisco
11MOY11	Marine	2	$ 137,640.00	New Salmon Queen Sportfishing, LLC	4.110	0.000	0.139	03-Jun-09	Alameda
11MOY12	Agriculture	1	$ 23,194.00	Ricioli Brothers	0.486	0.059	0.016	APCO	Sonoma
11MOY13	Marine	3	$ 227,461.00	Fly Rose Marine, Inc.	2.918	0.085	0.098	01-Jul-09	Santa Clara
11MOY14	Off-road	5	$ 264,398.00	Fremont Paving	1.622	0.247	0.117	03-Jun-09	Alameda
11MOY17	Marine	2	$ 182,160.00	David Underwood	1.557	0.055	0.059	01-Jul-09	Solano
11MOY18	Marine	1	$ 51,440.00	Shon Harbarth	1.430	0.036	0.042	APCO	Contra Costa
11MOY19	Marine	2	$ 217,544.00	City of Alameda	15.069	-0.083	0.447	03-Jun-09	Alameda
11MOY20	Marine	8	$ 3,791,855.00	City of Vallejo	94.079	1.495	2.793	03-Jun-09	Solano
11MOY22	Marine	1	$ 41,488.00	Bay Marine Services, Inc.	0.975	0.028	0.032	APCO	Marin
11MOY23	Marine	1	$ 65,240.00	Andy Guiliano	0.455	0.000	0.015	APCO	Contra Costa
11MOY24	Locomotive	1	$ 101,400.00	Richmond Pacific Railroad	1.052	0.020	0.007	03-Jun-09	Contra Costa
11MOY25	On-road	49	$ 153,560.00	Cemex Construction Materials Pacific LLC	0.000	0.000	0.173	03-Jun-09	Alameda, Contra Costa, San Mateo, Sonoma, San Francisco
11MOY26	Marine	2	$ 165,898.00	State of California, State Parks Depertment	1.041	0.023	0.035	01-Jul-09	Marin
11MOY27	Marine	2	$ 178,962.00	City and County of San Francisco, San Francisco Police Department	2.253	-0.034	0.079	01-Jul-09	San Francisco
11MOY30	Off-road	6	$ 140,343.00	J. Flores Construction Company	0.589	0.097	0.073	03-Jun-09	San Francisco
11MOY33	Marine	2	$ 144,504.00	Brian Guiles	1.329	-0.007	0.046	01-Jul-09	Marin
11MOY34	Marine	2	$ 209,056.00	Bodega Bay Sportfishers, Inc.	2.644	0.040	0.084	01-Jul-09	Sonoma
11MOY35	Marine	2	$ 49,830.00	Matt Butler	1.148	0.030	0.042	APCO	Marin
11MOY36	Marine	2	$ 106,394.00	Geoff and David Bettencourt	2.670	0.116	0.094	01-Jul-09	San Mateo
11MOY37	Off-Road	1	$ 58,384.00	Trucrew, Inc.	0.663	0.081	0.028	APCO	Contra Costa
11MOY39	Marine	2	$ 61,616.00	Harry Vogal	0.423	0.002	0.015	APCO	San Francisco
11MOY40	Marine	1	$ 102,984.00	James Gregory Smith	1.685	-0.001	0.057	01-Jul-09	Contra Costa
11MOY41	Marine	2	$ 199,466.00	Bay Marine Services, Inc.	6.868	0.196	0.206	01-Jul-09	Marin
11MOY44	Locomotive	5	$ 2,609,010.00	California Department of Transportation	49.080	1.150	0.390	01-Jul-09	Solano, Contra Costa, Alameda, Santa Clara
11MOY46	Marine	3	$ 2,068,071.00	APL Maritime Services, Ltd.	22.710	0.810	12.420	01-Jul-09	Alameda
11MOY48	Off-Road	1	$ 80,950.00	Contra Costa Topsoil, Inc	0.536	0.072	0.027	APCO	Contra Costa
11MOY51	Off-Road	4	$ 191,709.00	Stroer & Graff, Inc.	5.007	0.650	0.181	01-Jul-09	Contra Costa
11MOY52	Off-Road	4	$ 275,481.00	Salt River Construction Corp.	3.568	0.461	0.142	01-Jul-09	Marin
11MOY55	Agriculture	2	$ 42,180.00	Huneeus Vintners, LLC	0.614	0.080	0.020	APCO	Napa
38	Projects	139	$ 13,271,468.00		250.704	6.638	18.667		

Figure 1: CMP/ MSIF Funding Distribution by Equipment Category as of 6/12/09

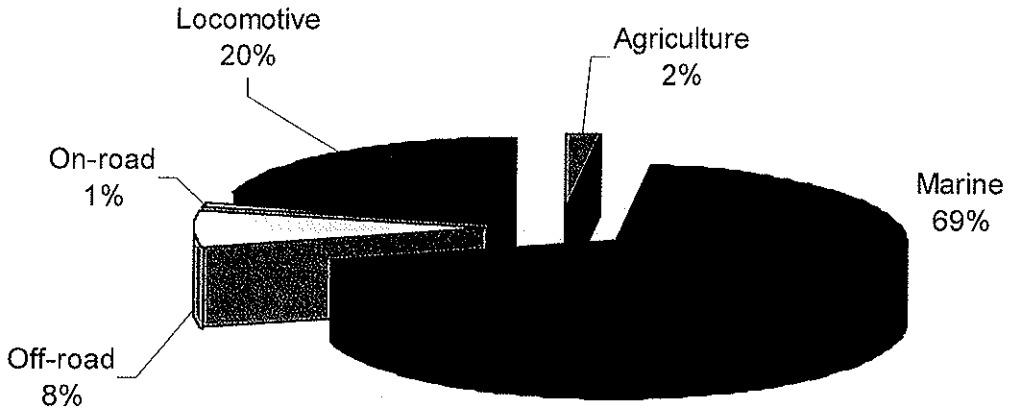
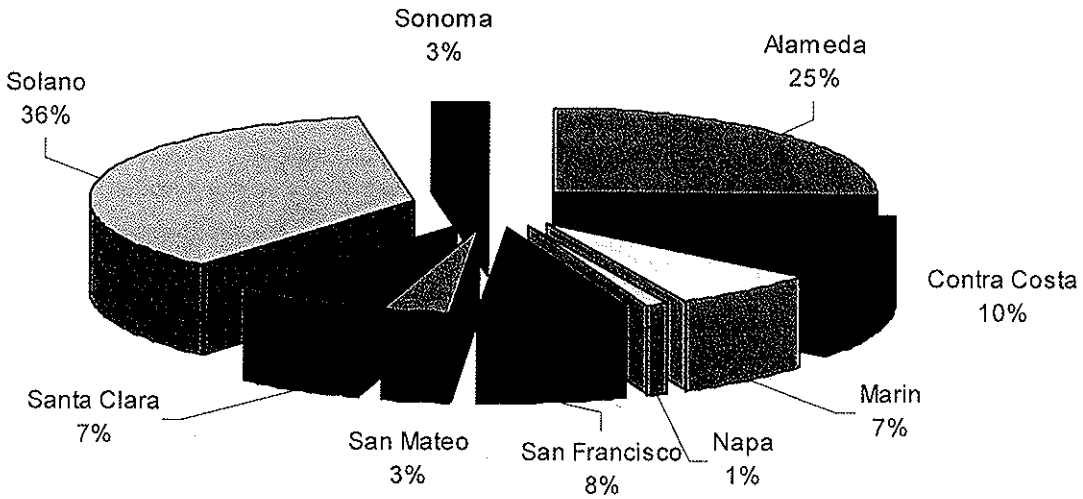


Figure 2: CMP/ MSIF Funding Distribution by County as of 6/12/09



BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Haggerty and Members of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 18, 2009

Re: Consideration of FY 2009/2010 Bicycle Facility Program: Annual Report for FY 2008/2009; and Proposed Revisions to Policies and Adoption of Program for FY 2009/2010

RECOMMENDED ACTIONS

Consider recommending Board of Directors:

1) Receive and file the Annual Report for the Bicycle Facility Program for Fiscal Year 2008/2009,

2) Approve the proposed Bicycle Facility Program Policies, presented in Attachment B, for use in Fiscal Year 2009/2010 and in subsequent years, and

3) Approve the allocation of $600,000 in TFCA Regional Funds to the Bicycle Facility Program for Fiscal Year 2009/2010, and the authorization for the Executive Officer/APCO to execute funding agreements in accordance with the Board-approved Bicycle Facility Program Policies.

BACKROUND/DISCUSSION

The Bicycle Facility Program (BFP) is funded through the Transportation Fund for Clean Air (TFCA); supported by a $4 surcharge on motor vehicle registration in the Bay Area. The goal of the program is to reduce motor vehicle emissions through the implementation of new bicycle facilities in the Bay Area. The BFP was established in 2007 to streamline the administration of grants to fund bicycle facility projects including: class I, II, and III bikeways, and the capital costs of bicycle parking.

FY 2008/2009 Annual Report

The total allocation of funds for FY 2008/2009 was $600,000. On April 2, 2008, the Board of Directors approved BFP Guidelines for FY 2008/2009, and the Air District began reviewing BFP applications on June 16, 2008. Twenty six applications were received in the amount of $1,214,867.

Twenty two applications met the approved guidelines, and were entered into a lottery held on July 30, 2008. With $600,000 in FY 2008/2009 funds, combined with $50,288 in returned funds from FY 2007/2008, nine projects were selected for award in the amount of $650,288; details are listed in Attachment A. The program was oversubscribed by $614,867.

Proposed Revisions to BFP Policies for FY 2009/2010

On April 21, 2009, Air District staff issued a request for comments on proposed BFP Policies for FY 2009/2010. The deadline for interested parties to submit comments was May 7, 2009. A table summarizing the comments received and Air District staff responses is provided in Attachment C.

The proposed BFP Policies for FY 2009/2010 are provided in Attachment B. Proposed changes to the BFP Policies include:

- Policy #2, *Eligible Projects*, would be revised to clarify that letters of intent may not substitute for a project's inclusion in a countywide or regional bicycle plan or congestion management program.
- Policy #5, *Maximum Grant Amount*, would be decreased from $210,000 (35% of the total allocation) to $120,000 (20%), in order to maximize the distribution of funds.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

None. Approval of the recommended policies and allocation will have no impact on the Air District's budget. TFCA revenues come from a dedicated external funding source. TFCA allocations do not impact the Air District's general fund or operating budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Avra Goldman
Reviewed by: Jack M. Colbourn

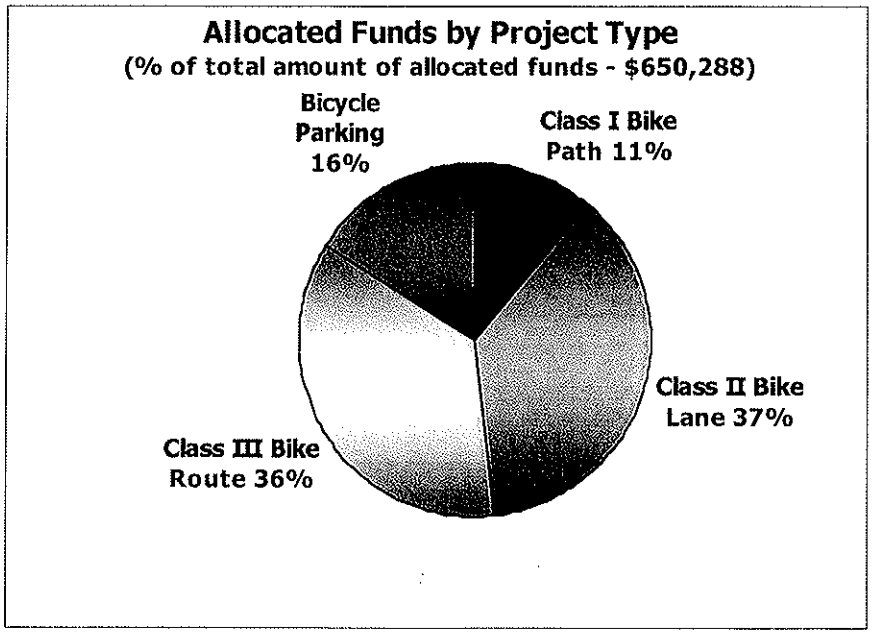
Attachments

ATTACHMENT A

FY 2008/2009 BICYCLE FACILITY PROGRAM AWARDED PROJECTS

Project #	County	Sponsor	Project Title	Grant Award
08BFP01	SM	City of Daly City	King Drive Bicycle Lanes	$ 38,000
08BFP02	SC	Santa Clara VTA	E-Locker Retrofit Program	$ 22,750
08BFP03	SON	City of Santa Rosa, Department of Transit and Parking	City of Santa Rosa Electronic Bicycle Locker Program	$ 71,080
08BFP04	CC	Richmond Community Redevelopment Agency	Barrett Avenue Bicycle Lane	$ 75,000
08BFP05	ALA	Alameda County Public Works	Stanley Boulevard Bicycle Lanes Project	$ 127,500
08BFP06	MAR	Marin County DPW	Build-Out of Marin County Bicycle Network	$ 210,000
08BFP07	SF	San Francisco General Hospital	SFGH Bicycle Lockers Project	$ 10,800
08BFP08	SM	City of Belmont	U.S. Highway 101 Bicycle/Pedestrian Overcrossing & Alameda de las Pulgas Bicycle Lane Project	$ 72,500
08BFP09	ALA	City of Hayward	Bikeways Class II and III	$ 22,658

TOTAL: $650,288*



*Total amount combines $600,000 for FY2008/2009 and $50,288 in unallocated funds from FY2007/2008.

ATTACHMENT B

PROPOSED BICYCLE FACILITY PROGRAM POLICIES FOR FY 2009/2010

The following policies apply only to the **Bicycle Facility Program**.

BICYCLE FACILITY PROGRAM DEFINITIONS

- "Bikeways" refers to Class-1 bicycle paths, Class-2 bicycle lanes, and Class-3 bicycle routes.
- "Racks/Lockers" refers to bicycle racks (including those on vehicles and vessels), and bicycle lockers.
- "Secure bicycle parking" refers to bicycle cages and bicycle parking stations.

GENERAL

1. **Purpose:** The Bicycle Facility Program (BFP) provides incentive funds to help offset the cost of implementing bicycle facility projects in the Bay Area. The BFP is a streamlined program of the Transportation Fund for Clean Air.

ELIGIBILITY

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

   Projects must conform to the provisions of California Health and Safety Code (HSC) sections 44220 et seq. and Air District Board of Directors adopted BFP Policies for FY 2009/2010.

   Projects must achieve surplus emission reductions, which means reductions that are beyond what is currently required through federal and state regulations both at the time the Air District approves a grant award and at the time of the execution of a funding agreement.

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

3. **Eligible Recipients and Authority to Apply:** Grant recipients must be responsible for the implementation of the project, have the authority and capability to complete the project, and be an applicant in good standing.

   A. **Eligible Recipients:** Public entities only.

   B. **Authority to Apply:** Applications must include either: 1) a signed letter of commitment from an individual with authority to enter into a funding agreement and carry out the project (e.g., Executive Director, Chief Financial Officer, City Manager, etc.), or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, Board of Directors, etc.) authorizing the submittal of the application and identifying the individual authorized to submit and carry out the project.

4. **Minimum Grant Amount:** $10,000 per project.

5. **Maximum Grant Amount:** $120,000 per project.

6. **Readiness:** Projects must commence in calendar year 2010 or sooner. For purposes of this policy, "commence" means to receive delivery of the Project's product provided by the project, or to award a contract to construct or install the Project.

APPLICANT IN GOOD STANDING

7. **In Compliance with Agreement Requirements:** Project sponsors who have failed to meet project implementation milestones or who have failed to fulfill monitoring and reporting requirements for any project funded by the Air District may not be considered eligible for new funding until such time as all of the unfulfilled obligations are met.

8. **Failed Audit:** Project sponsors who have failed either a fiscal audit or a performance audit conducted by or on behalf of the Air District for a prior Air District-funded project will be excluded from future funding for five (5) years. Additionally, project sponsors with open Air District projects will not be reimbursed for those projects until all audit recommendations and remedies have been satisfactorily implemented. A failed fiscal audit means an uncorrected audit finding that confirms an ineligible expenditure of funds. A failed performance audit means that a project was not implemented as set forth in the project funding agreement.

9. **Signed Funding Agreement:** Only a fully executed funding agreement (i.e., signed by both the project sponsor and the Air District) constitutes the Air District's award of funds for a project.

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

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

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

INELIGIBLE PROJECTS AND COSTS

11. **Duplication:** Projects that have previously received BFP or TFCA funds and therefore do not achieve additional emission reductions are not eligible for BFP funding.

12. **Costs for Maintenance, Repairs, and Operations:** Costs for maintenance, repairs, rehabilitation, and operations (e.g., for a bike station), are not eligible for BFP funding.

13. **Cost for Planning Activities**: Feasibility studies are not eligible for BFP funding, nor are planning activities that are not directly related to the implementation of a specific BFP project.

14. **Cost of Developing Proposals and Grant Applications:** The costs to develop proposals or prepare applications are not eligible for BFP funding.

15. **Administrative Costs:** Administrative costs are not eligible for BFP funding. Administrative costs include accounting for BFP funds, and fulfilling reporting and record-keeping requirements specified in a BFP funding agreement.

USE OF BFP FUNDS

16. **Eligible Costs:** Costs for design, engineering, installation, and preparation for required environmental review documents that directly support implementation of a project are eligible for BFP funding.

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

PROJECT TYPES & GRANT AMOUNTS

18. **Maximum Grant Award Amounts:**

Eligible project types and corresponding grant amounts

Project Type	Grant Amount
Class-1 Bicycle Path	$115,000 per mile of path
Class-2 Bicycle Lane – Continuous Construction	$ 85,000 per mile of roadway
Class-2 Bicycle Lane – Standard	$ 30,000 per mile of roadway
Class-3 Bicycle Route	$ 15,000 per mile of route
Bicycle Locker(s) – Electronic	$ 2,500 per locker
Bicycle Locker(s) – Retrofit mechanical to electronic	$ 650 per retrofit kit
Bicycle Locker(s) – Mechanical	$ 900 per locker
Bicycle Rack(s)	$ 60 per bicycle accommodated
Bicycle Rack(s) on Vehicles	$ 750 per rack
Secure Bicycle Parking	$ 130 per bicycle accommodated

The project types and funding levels set forth above meet the TFCA cost-effectiveness (i.e., funding effectiveness) of $90,000 of BFP funds per ton ($/ton) of total reactive organic gases (ROG), oxides of nitrogen (NO_x), and weighted particulate matter less than 10 microns in diameter (PM_{10}) emissions reduced.

PROJECT REQUIREMENTS

19. **Project Requirements:**

A. **General Project Requirements:** Projects must, where applicable, be consistent with design standards published in Chapter 1000 of the California Highway Design Manual.

B. **Project-Specific Requirements:**

i) Bikeway grant amounts are for bikeways going in two directions on a roadway; a bikeway going in a single direction would qualify for only one-half the amount listed in Paragraph 18 above.

ii) Bikeway projects must:

a. reduce vehicle trips made for utilitarian purposes (e.g., work or school commuting), and

b. be one of the following:

- located within one-half mile of at least three major activity centers (e.g., transit stations, office complexes, schools), or
- provide a gap closure (e.g., a bridge over a roadway) in, or an extension to, an existing bicycle network that already services three major activity centers. The new segment must be within three contiguous bikeway miles of the requisite activity centers. Gap Closure Projects may be eligible for TFCA funding under the Smart Growth Project type as well as BFP funding.

iii) Bicycle Racks/Lockers Projects must serve a major activity center (e.g., transit station, office building, or school).

iv) Secure Bicycle Parking Projects include bicycle cages and the capital costs of bicycle parking at bike stations.

v) Class-2 Bicycle Lane – Continuous Construction Projects must entail physical improvements (e.g., non-maintenance paving or the widening of a roadway shoulder) continuously over the length of the segment.

vi) Class-2 Bicycle Lane – Standard Projects include projects other than Continuous Construction, such as striping, marking and loop detectors.

vii) Grant amounts for Continuous Construction and Standard Class-2 Bicycle Lane Projects cannot be combined for the same segment.

ATTACHMENT C

COMMENTS RECEIVED AND STAFF RESPONSES: DRAFT FY 2009/2010 BICYCLE FACILITY PROGRAM POLICIES

Number Name, Title Agency or Entity	Comments	Staff Response
#1 **Matt Nichols** Principal Transportation Planner City of Berkeley	**Definitions:** It's not clear to me what is meant by "and secure bicycle parking." How is this different from racks and lockers? If it's meant to refer to bicycle cages and bike stations, it should say so explicitly. (This is defined below in Project Requirements – but should be moved up into definitions.)	Air District staff revised this section in the proposed policies to incorporate this comment.
	Eligibility: Projects in adopted local Bicycle Plans <u>must</u> be eligible for BFP funding. The Alameda Countywide Bicycle plan, for example, does not include many [of] the bicycle facilities included in Berkeley's Bicycle Plan. This is not a failing of either plan – countywide or regional plans are rightly focused on cross-county facilities, or other regional significance criteria. Please add the following: Projects must be new bicycle facilities, and included in an <u>adopted local bicycle plan</u>, adopted countywide bicycle plan, Congestion Management Program (CMP), or the Metropolitan Transportation Commission's Regional Bicycle Plan.	State law does not allow funding facilities that are only listed in local bicycle plans. Health and Safety Code 44241(b)(10) specifies that funding of bicycle facility improvement projects go toward projects that are included in an "adopted countywide bicycle plan or congestion management program."
	Readiness: I think defining it by calendar year is a mistake for two reasons, the time to execute a funding agreement with BAAQMD, and the fact that Berkeley operates on a July 1-June 30 fiscal year. Consider:...Projects must commence within 1 year of execution of Funding Agreement with BAAQMD. When would the BFP funding agreements be released, and when would they be due back for execution?	Projects will need to commence during the calendar year 2010 regardless of when the funding agreement is executed because the emissions reductions for each project must be achieved within a timely manner. Staff intends to issue all funding agreements by December 31, 2009; project sponsors have 60 days to sign and return them, and the Air District typically executes them within two weeks.
	Signed Funding Agreement: I don't think it's fair to bar a city from applying for BFP for 12 months if they failed to return a funding agreement. Sometimes cities can't execute a funding agreement for	Air District staff revised this section in the proposed policies to incorporate

Number Name, Title Agency or Entity	Comments	Staff Response
	reasonable cause – insurance, changes to the project conditions, etc. What's critical is that they are responsive and meet their obligations – they should formally forfeit the grant and provide reasons within the same 60 day period. Consider: Project sponsors who failed to return a funding agreement, or failed to respond with a forfeiture of the grant…	this comment.
	Grant amounts: The $60 per bike rack amount is far too low. A single inverted-U rack costs $250-$300, meaning $60 is 20%-25% of the total costs. In many cases, it wouldn't be worth it to apply, given the staff time involved in the application, funding agreement, invoicing and reporting. At a minimum, the grant amounts should be set to fund similar fractions of total project costs. I'm not sure, but I don't think that $115,000 per mile of a Class 3 facility (which requires bike route signage only!) is 20-[25]% of the total project cost.	The funding amounts are based on a maximum cost-effectiveness value of $90,000 per ton; increasing the funding amounts would worsen the cost effectiveness. In addition, the amounts are meant to cover a portion of the total cost, not to cover the entire cost of a project.
	Project Requirements: a. Bikeway grant amounts are for bikeways going in two directions on a roadway; a bikeway going in a single direction would qualify for only one-half the stated amount. What about bikeway on a one-way street? The amount should be based on a percentage of legitimate total project costs, and inclusion in an adopted bicycle plan.	a. Emissions reductions are considered to double for two-way streets as it is assumed that the to and from commutes are accounted for. If the street is only one way, there is only one leg of a trip accounted for, and subsequently only half of the emissions reductions are achieved.
	b. Does major activity center include commercial areas?	b. Yes.
	c. Class II – what about video detection?	c. Video detection equipment would be eligible under Class II Bicycle Lane Standard projects.

Number Name, Title Agency or Entity	Comments	Staff Response
#2 **Kenneth Tam** Park Planner II Sonoma County Regional Parks Department	We have concerns with BAAQMD proposal to limit grant amounts to $120,000 maximum. The funding cap will limit the length of the facility we can construct per funding cycle. Reasons for increasing the maximum grant limit: 1) The Draft Sonoma County wide Bicycle and Pedestrian Master Plan has over 25 proposed Class I projects that are over 2 miles long. 2) The length of a Class I to connect two destination centers/arterials can exceed one mile. For instance, the Hunter Creek Trail we received over $209,000 from TFCA for constructing 1.5 miles of Class I to connect two major arterials. The $115 [K] per mile of Class I path is okay but it should not be capped at $120,000. If the length of a Class I is longer than 1 miles, then we should be eligible to receive more funds to complete the project. The proposed cap would mean that we could only construct one mile of Class I per funding cycle regardless of the length of the project. If a cap is needed, how about a cap of $500,000?	The BFP is meant to contribute towards bicycle facility projects in the Bay Area. The cap is intended to allow multiple projects to be funded in multiple counties.
#3 **Gail Payne** Transportation Coordinator City of Alameda Public Works Dept.	It would be helpful if the amount for bicycle racks were increased. A standard U shaped bicycle rack, which fits two bicycles, costs about $145 to $150. The current reimbursement rate is only at $120. Another idea is to include skateboard and scooter racks as an option. Many kids ride skateboards and scooters to parks and schools. For clarification, does the below mean that additional line items are allowed for design, engineering and installation above and beyond the cost of purchasing a bike rack? Ideally, a jurisdiction would request to be reimbursed for the cost of the bike rack purchase and the cost of the staff time to install it. "Eligible Costs: costs for design, engineering, installation, and preparation for required environmental review documents that directly support implementation of a project are eligible for BFP funding."	Please see response to comment #2. BFP funds are limited by State law to bicycle-related projects. Yes, if the activity directly relates to the project.

AGENDA: 9

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: June 25, 2009

Re: Report of the Executive Committee Meeting of June 29, 2009

RECOMMENDED ACTION

The Executive Committee may recommend Board of Directors' approval to:

A) Amend the Administrative Code to re-establish a two-year term of office for Board Officers;
B) Send a letter of support for Supervisor Ken Yeager's appointment as the Bay Area Air Quality Management District representative on the California Air Resources Board.

BACKGROUND

The Executive Committee will meet on Monday, June 29, 2009. The Committee will receive the following reports and updates:

A) Joint Policy Committee Update;
B) Air District CEQA Guidelines Update;
C) Update on Preparation of Bay Areas 2009 Clean Air Plan;
D) Overview of Strategic Facilities Visioning Process;
E) Continued Discussion to Amend the Air District's Administrative Code Regarding Board of Directors Officers' Term of Office;
F) Consideration of Letter of Support for Appointment to the California Air Resources Board; and
G) Overview of Air District Select Milestones/Activity – 2008/2009.

Attached are the staff reports presented in the Executive Committee packet of June 29, 2009.

Chairperson Pamela Torliatt will give an oral report of the meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Lisa Harper
Reviewed by: Mary Ann Goodley

Attachment(s)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 11, 2009

Re: Joint Policy Committee Update

RECOMMENDED ACTION:

Receive and file.

DISCUSSION

At the June 29, 2009, meeting of the Executive Committee, Ted Droettboom will provide an update on the activities of the Joint Policy Committee.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 22, 2009

Re: Air District CEQA Guidelines Update

RECOMMENDED ACTION:

Receive and File.

BACKGROUND

At its meeting on November 19, 2008, the Board of Directors authorized the Executive Officer to execute a contract with EDAW, Inc. (EDAW) to assist with the update of the BAAQMD California Environmental Quality Act (CEQA) Guidelines (Guidelines). The contract has been executed and staff has been working with EDAW to update and revise the Guidelines.

DISCUSSION

The Guidelines recommend air quality significance thresholds for local agencies to use when preparing impact analyses under CEQA and advise them on the Air District's recommended analytical methodologies and mitigation measures. Through this work effort staff is reviewing, and revising as necessary, existing thresholds of significance, and developing new significance thresholds for greenhouse gas emissions from projects subject to CEQA. Staff also is updating analytical methodologies and mitigation measures used in the Guidelines.

Staff hosted public workshops for the Guidelines update in February and April 2009. At the workshops staff presented various options for developing thresholds of significance. Staff will conduct additional public workshops at appropriate steps during the Guidelines update process.

Staff will provide an update on the progress made developing the Air District's thresholds of significance and revising CEQA Guidelines.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

Funding for consultant services to update the Air District CEQA Guidelines is included in the approved FY 2008/2009 Air District budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Greg Tholen
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 22, 2009

Re: Update on Preparation of Bay Area 2009 Clean Air Plan

RECOMMENDED ACTION:

Receive and File.

BACKGROUND

The California Health & Safety Code requires air districts to revise their plans for attaining state ozone pollutant standards on a triennial basis. Under the terms of the Health & Safety Code, ozone plans must include "all feasible control measures" and reduce transport to neighboring air basins.

In response to state and federal requirements and guidelines, air quality planning to date has been performed on a pollutant by pollutant basis, with an emphasis on ozone planning. However, in the past several years, there has been growing interest in the concept of multi-pollutant air quality planning. In January 2004, the National Research Council issued recommendations calling for air quality agencies to pursue a multi-pollutant, risk-based, "one atmosphere" approach for air quality planning. US EPA has been moving to gradually embrace the concept of planning on a multi-pollutant basis.

DISCUSSION:

The 2009 Clean Air Plan (CAP) will serve as an update to the 2005 Ozone Strategy. In developing the CAP, the District will employ a multi-pollutant framework to address ozone, particulate matter, air toxics, and greenhouse gases by means of an integrated control strategy. Staff will evaluate the potential benefits of each control measure in terms of reducing health impacts and reducing emissions of greenhouse gases. Staff has developed a multi-pollutant evaluation methodology to help analyze and compare the benefits of control measures.

Staff is currently developing the draft control strategy which will be at the heart of the CAP. Staff hosted public workshops in January, April and June 2009 to solicit input on potential control measures that should be included in the CAP. Staff has also solicited public input on the multi-pollutant evaluation methodology.

Staff will provide a presentation on potential control measures and the multi-pollutant evaluation methodology.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

No impact.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: David Burch
Reviewed by: Henry Hilken

AGENDA: 7

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 23, 2009

Re: Overview of Strategic Facilities Visioning Process

RECOMMENDED ACTION:

Receive and file.

BACKGROUND

The Budget and Finance Committee at its April 29, 2009 meeting received a presentation on assigning Capital Facilities Planning responsibilities to the Committee. The Committee at its April 29th meeting discussed a Request for Proposal that was initiated in 2008 with a scope of work to analyze existing and future space needs, cost, and various options. Staff agreed to return to the Committee to provide a presentation on vendor selection of the Request for Proposal for Strategic Facilities Planning.

The assigning of Capital Facilities planning responsibilities to the Budget and Finance Committee was approved by the Board of Directors' at its May 6, 2009 meeting.

A majority of the members of the Budget and Finance Committee are on the Executive Committee. It is not anticipated that the Budget and Finance Committee will meet until after the State budget has been approved.

DISCUSSION

Staff's initial Request for Proposal for a Strategic Facilities Planning process has been revised. The revised RFP has been scaled back and will include a Phase I: Visioning process and Phase II: Data Gathering.

Staff has selected Hellmuth, Obata + Kassabaum, Inc. (HOK) Advanced Strategies in a competitive bid process in an amount not to exceed $35,000.

Staff will provide a presentation on the scope of work to be conducted by HOK Advanced Strategies and receive direction from the Committee.

BUDGET/FINANCIAL IMPACT:

Funding for consulting services for this project is included in Program 702 of the approved FY 2008/2009 Air District budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mary Ann Goodley

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: July 23, 2009

Re: Continued Discussion to Amend the Air District's Administrative Code Regarding Board of Directors Officers' Term of Office

RECOMMENDED ACTION:

The Committee will continue discussions to amend the Air District's Administrative Code to revise the current one-year term of office for Board Officers to a two-year term of office. Consideration of Possible Amendments to the Air Districts' Administrative Code Division I, Section 2.1: Officers of the Board.

BACKGROUND

The term of office for Board Officers is currently a one-year term of office and was amended by the Board of Directors in 2003, effective 2005, from a two-year term of office to a one-year term. In 1999 the term of office was amended to a two-year term of office for the Chairperson, Vice-Chairperson and Secretary.

The Air District's Administrative Code Division I, Section 14 enables the Board of Directors to amend its Administrative Code "at any meeting by a vote of a majority of the members of the Board of Directors, provided notice of such amendments has been given at a preceding regular meeting."

The practice at other regional agencies with regard to the term of office for their respective Officers is as follows:

1) Metropolitan Transportation Commission- Chairperson two-year term
2) Association of Bay Area Governments' President serves two-year
3) South Coast Air Quality Management District, Sacramento Metro Air Quality Management District, and the Mojave Air Quality Management District is set by statue and have two-year term of office;

DISCUSSION

Per direction received at the Board of Directors' meeting of May 20, 2009, the Committee was asked to continue discussions on this item.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Mary Ann Goodley

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Pamela Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 17, 2009

Re: Appointment of Bay Area Air Quality Management District Representative on CARB Board

RECOMMENDED ACTION:

Consider recommending Board of Directors' approval to send a letter of support for Supervisor Ken Yeager's appointment as the Bay Area Air Quality Management District's representative on the California Air Resources Board.

DISCUSSION

Santa Clara County Supervisor Ken Yeager has been a member of the Bay Area Air District Board of Directors since January 2008. Supervisor Yeager was appointed by Governor Schwarzenegger as the Bay Area Air Quality Management District representative to the California Air Resources Board in January, 2009.

The Senate Rules Committee will hold a hearing on July 1, 2009 to consider confirming Governor Schwarzenegger's appointment. The request before the Executive Committee is to consider sending a letter to the Senate Rules Committee supporting Supervisor Yeager's appointment.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

AGENDA: 10

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Torliatt and Members of the Executive Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 22, 2009

Re: Overview of Air District Select Milestones/Activity – 2008/2009

RECOMMENDED ACTION:

None. For discussion only.

BACKGROUND

The following document lists select Air District milestones for the 2008 – 2009 timeframe. The Milestones Document was initially developed in the fall of 2008, in anticipation of upcoming activity. The document is not a comprehensive list of all District activity and products. A number of ongoing and regularly-occurring activities are not listed in this document, such as: issuing of permits, issuing of notices of violation, All Hands meetings, etc.

The Milestones Document was provided to the Board Chair in September 2008, and followed by subsequent updates. The Document was distributed to the Board of Directors at the January 2009 retreat.

DISCUSSION:

The Milestones Document identifies over 60 deliverables and/or initiatives scheduled for development and execution from November 2008 to December 2009, under the Direction of the Executive Officer. This total includes initiatives which were added after the initial development of the Milestones Document in fall 2008.

As of June 2009, over half of the items on the attached document have been completed, and several others are nearly complete or at an advanced state of development. Some of the completed milestones include:

- Publication of the 2008 Annual Report
- Hosting of regional Climate Protection Summit
- Launching of new website for www.baaqmd.gov
- Adoption of the FY 2009-2010 Budget and Fee amendments
- Numerous initiatives regarding Incentive Programs, including a successful application for Diesel Emissions Reduction Act funding from EPA
- Development of a new Vision and Mission statement for the Air District

Milestones currently underway include:

- Development of an Indirect Source Review program
- Development of a Cumulative Impacts regulatory recommendation
- Update of District CEQA Guidelines
- Development of a Clean Air Plan

Additional discussion of the milestones will take place at the Committee Meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Ana Sandoval

Attachment

Bay Area Air Quality Management District
Select Milestones and Activity 2008-2009

Printed June 22, 2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
11/2008	Ports Action Plan	Complete		Staff will present to the Ad-Hoc Committee on Port Emissions a plan outlining future action with Bay Area ports. Recommended by Ad-Hoc Committee on Port Emissions on 11/17/2008. Approved by Board of Directors on 11/19/2008.
11/2008	Rule Dev: Reg. 8, Rule 20*	Complete		Board of Directors will consider adoption of amendments to Reg. 8-20: Graphic Arts Printing and Coating Operations, to reduce VOCs. 2005 Ozone Strategy measure SS 2. Adopted by Board of Directors on 11/19/2008.
11/2008	Spare the Air: Winter Season Launch	Complete		District staff will launch the 2008-2009 Spare the Air Winter Season. Launched season 11/1/2008.
11/2008	Climate: Strategic Work Plan	Complete		Staff will present to the Climate protection Committee the Climate Program Strategic Work Plan for the time frame 2009-2011. Agenda item deferred. Migrated approach to Indirect Source/Clean Air Communities
11/2008	Admin Code Changes re. Advisory Council	Complete		Board of Directors will consider adoption of changes District's Administrative Code re. Advisory Council. Adopted by Board of Directors on 1/07/2009. Other changes ongoing.
11/2008	Legislative Agenda	Complete		Staff will present to the Legislative Committee potential legislative proposals for the District's legislative agenda for 2009. Addressed at Legislative Committee on 1/08/2009.
11/2008	AB 32: Proposed Scoping Plan	Complete		Staff from the ARB will make a presentation to the Board of Directors on the Proposed Scoping Plan. Chuck Shulock, presented to the Board of Directors on 11/5/2008.

Bay Area Air Quality Management District
Select Milestones and activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
12/2008	Rule Dev: Reg. 8, Rule 45 *	Complete		Board of Directors will consider adoption of amendments to Reg. 8-45: Motor Vehicle and Mobile Equipment Coating Operations to reduce VOCs; 2005 Ozone Strategy measure SS 1. Adopted by Board of Directors on 12/03/2008.
12/2008	Community Grant Program	Complete		Staff will present to the Executive Committee and Full Board guidelines for distributing grant funding for emissions reductions and education in Bay Area communities. Funding level of $250,000 recommended by Executive Committee on 11/24/08 and approved by Board of Directors on 12/03/2008. Guidelines approved by Executive Committee on 5/18/09. Call for projects opened on June 22, 2009.
12/2008	CARE: West Oakland Truck Survey Results	Underway		Staff will publish results of the West Oakland Truck Survey conducted by staff and community members to assess on-road truck emissions in West Oakland. Report undergoing peer review and final edits. Publication anticipated in Summer 2009.
12/2008	Climate: Regional GHG Inventory	Complete		Staff will publish the regional GHG inventory for the 2005 base year. Published 12/30/08.
12/2008	TFCA: County Manager Program	Complete		Open call for projects. Policies presented to Mobile Source Committee on 10/23/08 and approved by Board of Directors on 11/05/08. Anticipate awards approved by Board of Directors in July 2009. Guidance issued to County Program Managers on 12/24/08. County Program Managers currently conducting their Call for Projects.
12/2008	AB 32: Proposed Scoping Plan Comment Letter	Complete		Board of Directors will consider action on submitting a comment letter to ARB on the Proposed Scoping Plan. Approved by Board of Directors on 12/03/2008. Letter signed by Chair Torliatt on 12/03/2008.
12/2008	Lower Emission School Bus Program	Underway		District Board of Directors will make grant awards. Call for projects occurred in September 2008. Anticipated completion June 2010.

Bay Area Air Quality Management District
Select Milestones and Activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
12/2008	TFCA: Audit Presentation	Complete		Staff will present to the Mobile Source Committee a presentation on the TFCA Audit results. Presented to the Mobile Source Committee on 11/19/2008.
1/2009	Annual Board Retreat	Complete		Board of Directors Annual Retreat to discuss major initiatives of calendar year 2009. Held on January 21, 2009 at Claremont Hotel.
1/2009	Inter-Air District Meeting for Board of Directors	Underway		Tentatively scheduled for July 29, 2009, at the SJVAPCD Northern Office, 4800 Enterprise Way, Modesto.
1/2009	Rule Dev: Reg. 8- Rules 33 and 39*	Complete		Board of Directors will consider adoption of amendments to Reg. 8-33 Bulk Terminals to reduce VOCs. 2005 Ozone Strategy measure SS 7. Hearing opened February 4. Adopted by the Board of Directors on 4/15/2009.
New in 1/2009	Clean Air Communities Initiative	New Initiative Underway		Presentation of initiative to Board of Directors. Staff working on indirect source regulatory concept and cumulative impacts recommendation.
New in 1/2009	Strategic Vision	New Initiative Complete		Strategic Vision Draft presentation to Board of Directors. Presented to Board of Directors on 1/21/2009. Final Strategic Vision document approved by Executive Committee on 5/18/2009 and by the Board of Directors on 5/20/09.
2/2009	Rule Dev: Reg. 8- Rule 17, Reg. 11 - Rule 16*	Completed		Board of Directors will consider adoption of amendments to Reg. 8-17, Petroleum Dry Cleaning Operations, 11-16 Perchloroethylene and Synthetic Solvent Dry Cleaning Operations, to account for ARB new Air Toxic Control Measure, plus further amendments to reduce VOCs. Adopted at 3/4/2009 Board of Directors Meeting.
2/2009	TFCA: Regional Fund Grant Guidelines	Completed		Board of Directors will consider adoption of program guidelines. Call for projects to occur in April 2009. Awards to occur in October 2009. Presented to Mobile Source Committee on 3/26/ 2009.

Bay Area Air Quality Management District
Select Milestones and activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
2/2009	Carl Moyer Program (CMP)/ Mobile Source Incentive Fund	Complete		Open call for projects for Program Year 11. Open call underway. Projects presented to Mobile Source Committee and Board of Directors for Approval in May and June 2009.
2/2009	Foundation	Complete		The Board will consider election of Board of Directors for Foundation and will receive a presentation on a work plan for the foundation. Selection of Board of Directors for foundation discussed at Climate Protection Committee meeting on 5/28/09.
2/2009	Production System Proof of Concept	Complete		Staff will present the Executive Committee with an update on the production system, including an example of new software features that are under development. Presented to Executive Committee on 11/24/2008 and 3/16/2009.
2/2009	Annual Financial Audit	Complete		Staff will present the Budget & Finance committee the results of the Annual Financial Audit, in accordance with the Single Audit Act, which is applicable to Federal awards. The audit will be conducted during January 2009. Presented to Budget and Finance Committee on 2/25/09.
3/2009	Port Commission and Air District Directors meeting	Complete		Joint meeting between Port Commission and Air District Board of Directors/Air District Ad Hoc Committee. Met on February 17, 2009.
3/2009	Rule Dev: Reg. 8- Rule 3 *	Underway		Board of Directors will consider adoption of amendments to Reg. 8-3 Architectural Coatings to reduce VOCs. 2005 Ozone Strategy measure FSM 2. Rescheduled to 7/1/2009. Scope will be broadened to include reactivity-based standards.
3/2009	Land Use Guidelines	Underway		Staff will publish a guidance document to help cities and counties assess health impacts to new residential developments from existing toxic sources and will recommend mitigation if necessary. Release of the Land Use Guidelines will be synchronized with revisions to the CEQA Guidelines for a consistent and comprehensive approach Release is tentatively scheduled for Summer 2009.

Bay Area Air Quality Management District
Select Milestones and Activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
3/2009	Conoco Phillips AG Settlement	Complete		Staff will bring an update to the Climate Protection Committee regarding the MOU with Attorney General, guidelines for distribution of funds, and anticipated time frames for call for projects and awards. MOU signed between Air District and Attorney General on 11/24 /2008. Presented to Climate Protection Committee on 2/20/2009 and 5/28/09. Update expected to Climate Protection Committee at subsequent meeting.
New in 3/2009	Diesel Emissions Reduction Act	Underway		District applied to EPA for DERA funds in April. EPA has awarded $2M in funding. Contract with EPA expected late Summer 2009. District to award grants in 12/09
4/2009	TFCA Regional Fund Grants	Complete		Open call for projects. Awards to occur in October 2009.
4/2009	Winter Air Quality Post Season Report	Complete		Staff will present a summary of the 2008-2009 particulate matter season summarizing exceedances of air quality standards and the first season of the wood smoke rule. Presented at April 1, 2009 Board Meeting.
4/2009	Toxic Air Contaminant High Resolution Modeling Report	Underway		Staff will publish a report on regional modeling of air toxics concentrations and risk at 1-km resolution.
5/2009	Fee Amendments	Complete		Board of Directors will consider adoption of proposed amendments to District Regulation 3: Fees, cost recovery for implementation and enforcement of regulatory programs for stationary sources. Adopted by Board of Directors of 5/20/2009.
5/2009	"Spare the Air" Summer Season Launch	Complete		The 2009 Spare the Air Summer Season began 5/11/2009.

Bay Area Air Quality Management District
Select Milestones and Activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
5/2009	Launch of new website	Complete		District staff will launch an upgraded District website with upgraded look and feel and several new interactive features. Content will remain mostly the same. Launched June 2009.
5/2009	Annual Report	Complete		District staff will publish the District Annual Report. Report will be available on-line. Published June 2009.
5/2009	Climate: Local Government Summit	Complete		District staff will host event targeting local elected officials, staff, and supporting organizations; provide how-to information on GHG reduction efforts; highlight success stories from District Climate Protection grant program. Held on 5/4/2009
6/2009	Budget	Complete		Board of Directors will consider adoption of the FY 2009-2010 budget. The process will begin in January 2009. Adopted by Board of Directors on 6/3/2009
6/2009	Rule Dev: Reg. 8- Rule 32 *	Underway		Board of Directors will consider adoption of amendments to Reg. 8- 32 Wood Products Coatings to reduce VOCs. 2005 Ozone Strategy measure SS 5. Rescheduled to Summer 2009. Scope will be broadened to include reactivity-based standards.
6/2009	California Goods Movement Bond (I-Bond)	Underway		Open call for projects. Awaiting State I-Bond funds.
7/2009	TFCA County Manager Program	Underway		District Board of Directors approves projects. Committee will receive presentation at July Mobile Source committee.
7/2009	Carl Moyer Program (CMP)/ Mobile Source Incentive Fund			District Board of Directors approves grant projects. Committee will receive presentation at July Mobile Source committee.

Bay Area Air Quality Management District
Select Milestones and activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
7/2009	Language Access Policy and Action Plan	Underway		Staff will develop a policy and implementation plan for providing District information and assistance in additional languages. Staff is currently working with a consultant and expects to have policy developed in Summer 2009.
7/2009	Indirect Source Emission Reduction Effort	Underway		Staff will present potential approaches to address criteria pollutant emissions from Indirect Sources. A concept was presented to Board of Directors on 1/21/2009. Work underway in 2009.
7/2009	CEQA Guidelines Update and Land Use Guidelines (moved from March and June, respectively)	Underway		Staff will publish revisions to current BAAQMD CEQA Guidelines "Assessing the Air Quality Impacts of Projects and Plans," April 1996, Revised December 1999. Release of the CEQA Guidelines will be synchronized with revisions to the Land Use Guidelines for a consistent and comprehensive approach Release is tentatively scheduled for Summer.
8/2009	CCAR Inventory	Underway		Staff will submit the District's operational GHG emission inventory to the California Climate Action Registry.
9/2009	Rule Dev: Reg. 9- Rule 10 *	Underway		Board of Directors will consider adoption of amendments to Reg. 9-10 NOx and CO from Boilers, Steam Generators and Process Heaters in Petroleum Refineries to reduce NOx. 2005 Ozone Strategy measure FSM 14.
9/2009	Cumulative Risk Recommendation	Underway		Staff will present recommendations for next steps in implementing the cumulative risk resolution adopted by the Board of Directors. Staff has convened a Cumulative Risk Workgroup to weigh in on the development of a regulation.

Bay Area Air Quality Management District
Select Milestones and Activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
9/2009	Recommendation on GHG Emission Reduction Certification	Underway		As part of the Climate Protection Program, staff will make recommendations regarding initiation of a District program to certify GHG reductions from voluntary early action. Staff has been in conversation with the California Climate Action Registry/Climate Action Reserve to discuss offset projects in the Bay Area.
10/2009	TFCA Regional Fund Grants			Board of Directors will consider approval of grant projects.
10/2009	PM Modeling Capability Presentation			Staff will present a report on modeling of particulate matter sources, formation, transport and ambient concentrations.
10/2009	Summary of 2009 Legislative Year			Staff will present to the Legislative Committee a summary of the 2009 legislative year in Sacramento.
11/2009	2009 Multi-Pollutant Clean Air Plan	Underway		Board of Directors will consider adoption of the 2009 Multi Pollutant Clean Air Plan, the update to the 2005 Ozone Strategy to fulfill CA Clean Air Act. Plan will seek to develop integrated approach to reduce multiple pollutants: ozone precursors, PM, Air Toxics, and GHGs. Staff has held multiple workshops and is developing multi-pollutant evaluation method and compiling potential control measures
11/2009	Rule Dev: Reg. 8- Rule 50 *	Underway		Board of Directors will consider adoption of amendments to Reg. 8 -50 Polyester Resin Operations Amendments to reduce VOCs. 2005 Ozone Strategy measure SS 4.
11/2009	Launch Spare the Air Winter Season			Staff will launch the 2009-2010 Spare the Air Winter Season.

Bay Area Air Quality Management District
Select Milestones and Activity 2008-2009

Anticipated Completion	Key Words	Status		Milestone Description and Update
11/2009	TFCA County Manager Program			Board of Directors will consider adoption of program policies for the TFCA County Manager Program.
11/2009	California Goods Movement Bond (I-Bond)			Board of Directors will consider approval of grant projects.
11/2009	Prepare for Employee Association Contract Negotiation	Underway		Staff will prepare to negotiate next District contract with the Employee Association.
11/2009	Potential Legislative Proposals for 2010			Staff will present to the Legislative Committee potential legislative proposals for the District's legislative agenda for 2010.
12/2009	TFCA Audit Presentation			Staff will present to the Mobile Source Committee a presentation on the TFCA Audit results.

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: June 10, 2009

Re: Public Hearing to Consider Proposed Amendments to Regulation 8, Rule 3: Architectural Coatings and Adoption of a CEQA Negative Declaration

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RECOMMENDED ACTION:

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

- Adopt proposed amendments to Regulation 8, Rule 3: Architectural Coatings; and
- Adopt a California Environmental Quality Act (CEQA) Negative Declaration.

BACKGROUND

Regulation 8, Rule 3 sets volatile organic compound (VOC) emission limits for architectural coatings. Architectural coatings include house paints, stains, primers, roof coatings, waterproofing sealers, and industrial maintenance coatings. Architectural coatings are used for aesthetics, for protection, and for labeling on stationary structures such as buildings, fences, and roadways. When these coatings are applied, VOCs are emitted.

The Air District proposed to investigate reductions in architectural coatings emissions in Further Study Measure FS-2 in the 2005 Ozone Strategy. In 2007, the Air Resources Board (ARB) approved the Suggested Control Measure (SCM) for Architectural Coatings. The proposed amendments incorporate new VOC limits from the SCM.

DISCUSSION

The proposed amendments to Regulation 8, Rule 3 would:

- Reduce VOC limits for
  - flat, non-flat and high gloss coatings;
  - basement specialty coatings;
  - concrete/masonry sealers;
  - dry fog coatings;
  - mastic texture coatings;
  - roof coatings;
  - specialty primer, sealers & undercoaters;
  - waterproofing membranes;
  - aluminum roof coatings;
  - bituminous roof coatings;
  - driveway sealers;
  - floor coatings;
  - primers, sealers and undercoaters;
  - rust preventative coatings;
  - traffic marking coatings;
  - zinc-rich primers.

- Set January 1, 2011 as the date for manufacturers to meet the new limits, except for limits for rust preventative coatings and specialty primers, sealers and undercoaters, which would become effective on January 1, 2012; and

- Add or eliminate coating categories to make Reg. 8-3 more enforceable, clearer and consistent with market categories for architectural and industrial maintenance coatings.

The proposed amendments would result in a VOC emission reduction of 5.4 tpd, or about a 32 percent reduction of total Bay Area emissions from this source category. Total costs to manufacturers and consumers are estimated to be about $4.42 million per year in the Bay Area. This translates to an average cost increase of $1.21 per gallon of coating. The resulting cost effectiveness is $2,243 per ton of VOC reduced, making these amendments one of the most cost effective measures among those currently being adopted and implemented by the Air District.

A socioeconomic analysis has found that the costs of the rule amendments would not create economic dislocation or loss of jobs, including to small businesses. Pursuant to the California Environmental Quality Act (Public Resources Code 21000 et seq.), an initial study for the proposed amendments has been conducted by Environmental Audit, Inc., concluding that the proposed rule would not create any significant adverse environmental impacts. A Negative Declaration is proposed for adoption.

RULE DEVELOPMENT PROCESS

The process to bring this proposal to the Board of Directors has been a comprehensive process involving discussions with architectural coatings manufacturers, their suppliers and trade associations, and consultation with other regulatory agencies such as ARB, EPA, and other California air districts. In the development of this proposal, District staff:

- Participated in the development of ARB's 2007 Architectural Coatings SCM;
- Held meetings and conference calls, and met and corresponded via telephone calls, emails and letters with architectural coatings manufacturers, suppliers, solvent manufacturers, coating and solvent manufacturing association representatives, and end users; and
- Consulted with staff members from the ARB and EPA.
- Developed the economic analysis based on the analysis presented in the 2007 SCM technical support document supplemented with additional costing information provided by coating manufacturers.
- Hosted a public workshop to inform and solicit comments from the affected industries and interested public on the proposed amendments to Rule 8-3. The workshop was held at the District office on January 13, 2009. Stakeholders, who included coating industry representatives, and staff members from ARB, attended in person or via conference call.

Final proposed amendments to Regulation 8, Rule 3, a staff report, a CEQA initial analysis and Negative Declaration, and a socioeconomic analysis were posted for public review and

comment on May 21, 2009. Public comments on the proposed amendments, and staff responses, are attached as Appendix A.

CHANGES TO THE RULE SINCE PUBLICATION

Two minor corrections have been made to the proposed amendments since publication. The first change corrects a drafting error in Section 8-3-306. The section allows a rust preventative coating to be used on industrial surfaces if it meets the lower VOC limit for industrial maintenance coating. Industrial maintenance coatings are usually applied by professional contractors and require personal protective gear such as an air supply to be used when applied. A rust preventative coating is allowed a higher VOC limit, but is intended for homeowners to paint metal such as iron fences, metal flashing, gutters and trim. The proposal was revised to clarify that rust preventative coatings are allowed for industrial use provided the coatings meet the lower industrial maintenance coating VOC limit. The second change is in Section 8-3-401.10. The labeling requirement for faux finishing topcoats is only intended to apply to clear topcoats used with and applied over faux finish coatings used to simulate other surfaces. The changes are clarifications, preserve the intent of the rule and do not require that the public hearing be continued to adopt the proposed amendments.

BUDGET CONSIDERATION/FINANCIAL IMPACTS

Staff does not anticipate any additional costs to the Air District to administer and enforce the proposed amended rule.

Respectfully submitted,

Jack P. Broadbent
Executive Officer / APCO

Prepared by: Victor Douglas
Reviewed by: Henry Hilken

Attachments:

Proposed amendments to Regulation 8, Rule 3: Architectural Coatings;

Staff Report including appendices
- Appendix A: Comments and Responses
- Appendix B: Socioeconomic Analysis
- Appendix C: CEQA Initial Study and Negative Declaration

REGULATION 8
ORGANIC COMPOUNDS
RULE 3
ARCHITECTURAL COATINGS

INDEX

8-3-100 GENERAL

8-3-101 Description
8-3-102 Applicability
8-3-103 Severability
8-3-110 Exemptions
8-3-111 Deleted November 21, 2001
8-3-112 Deleted January 8, 1986
8-3-113 Deleted November 21, 2001
8-3-114 Deleted November 21, 2001
8-3-115 Limited Exemption, Liter Containers
8-3-116 Limited Exemption, Early Compliance

8-3-200 DEFINITIONS

8-3-201 Adhesive
8-3-202 Aerosol Coating Product
8-3-203 Aluminum Roof Coating
~~8-3-203 Antenna Coating~~
~~8-3-204 Antifouling Coating~~
8-3-20~~5~~4 Appurtenances
8-3-20~~6~~5 Architectural Coating~~s~~
8-3-206 Basement Specialty Coating
8-3-207 Bitumens
8-3-208 Bituminous Roof Coating
8-3-209 Bituminous Roof Primer
8-3-210 Bond Breaker~~s~~
~~8-3-211 Clear Brushing Lacquers~~
~~8-3-212 Clear Wood Coatings~~
8-3-21~~3~~1 Coating
8-3-21~~4~~2 Colorant
8-3-21~~5~~3 Concrete Curing Compound
8-3-214 Concrete/Masonry Sealer
8-3-215 Driveway Sealer
8-3-216 Dry Fog Coating
8-3-217 Enamel
8-3-21~~7~~8 Exempt Compound
8-3-21~~8~~9 Faux Finishing Coating
8-3-2~~19~~20 Fire-Resistive Coating
~~8-3-220 Fire-Retardant Coating~~
8-3-221 Flat Coating
8-3-222 Floor Coating
~~8-3-223 Flow Coating~~
8-3-22~~4~~3 Form-Release Compound
8-3-22~~5~~4 Graphic Arts Coating or Sign Paint
8-3-22~~6~~5 High-Temperature Coating
8-3-22~~7~~6 Industrial Maintenance Coating
~~8-3-228 Lacquer~~
8-3-22~~9~~7 Low-Solids Coating

8-3-23~~0~~28 Magnesite Cement Coating
8-3-229 Manufacturer's Maximum Thinning Recommendation
8-3-23~~1~~0 Mastic Texture Coating
8-3-231 Medium Density Fiberboard (MDF)
8-3-23~~21~~2 Metallic Pigmented Coating
8-3-23~~32~~3 Multi-Color Coating
8-3-23~~43~~4 Nonflat Coating
8-3-23~~54~~5 Nonflat – High Gloss Coating
8-3-23~~65~~6 Non-Industrial Use
8-3-23~~6~~7 Particleboard
8-3-23~~7~~8 Pearlescent
8-3-23~~8~~9 Plywood
8-3-2~~379~~40 Post-Consumer Coating
8-3-2~~384~~01 Pre-Treatment Wash Primer
8-3-2~~394~~12 Primer, Sealer, and Undercoater
~~8-3-240 Quick-Dry Enamel~~
~~8-3-241 Quick-Dry Primer, Sealer, and Undercoater~~
8-3-24~~2~~3 Reactive Penetrating Sealer
8-3-24~~23~~4 Recycled Coating
8-3-24~~3~~45 Residential
8-3-24~~45~~6 Roof Coating
8-3-24~~56~~7 Rust Preventative Coating
~~8-3-246 Sanding Sealer~~
~~8-3-247 Sealer~~
8-3-24~~87~~8 Secondary Industrial Materials ~~Coating (Rework)~~
8-3-24~~8~~9 Semitransparent Coating
8-3-2~~49~~50 Shellac
8-3-25~~0~~1 Shop Application
8-3-25~~1~~2 Solicit
8-3-25~~2~~3 Solvent
8-3-25~~23~~4 Specialty Primer, Sealer and Undercoater
8-3-25~~3~~45 Stain
8-3-25~~5~~6 Stone Consolidant
8-3-25~~4~~67 Swimming Pool Coating
~~8-3-255 Swimming Pool Repair and Maintenance Coating~~
~~8-3-256 Temperature-Indicator Safety Coating~~
8-3-25~~7~~8 Tint Base
8-3-25~~8~~9 Traffic Marking Coating
8-3-2~~59~~60 Tub and Tile Refinish Coating
8-3-2~~59~~60~~1~~ Undercoater
~~8-3-260 Varnish~~
8-3-26~~1~~2 Veneer
8-3-26~~2~~3 Virgin Materials
8-3-26~~13~~4 Volatile Organic Compound (VOC)
8-3-26~~2~~45 VOC Content
8-3-26~~5~~6: Waterproofing Membrane
8-3-26~~6~~7 Wood Coatings
~~8-3-263 Waterproofing Sealer~~
~~8-3-264 Waterproofing Concrete/Masonry Sealer~~
8-3-26~~57~~8 Wood Preservative
8-3-26~~8~~9 Wood Substrate
8-3-2~~69~~70 Zinc-Rich Primer
8-3-27~~0~~1 Antenna Coating
8-3-27~~1~~2 Antifouling Coating
8-3-27~~2~~3 Clear Brushing Lacquers
8-3-27~~3~~4 Clear Wood Coatings
8-3-27~~4~~5 Fire-Retardant Coating
8-3-27~~5~~6 Flow Coating

8-3-27~~6~~7 Lacquer
8-3-27~~7~~8 Quick-Dry Enamel
8-3-27~~8~~9 Quick Dry Primer, Sealer, and Undercoater
8-3-2~~79~~80 Sanding Sealer
8-3-28~~0~~1 Sealer
8-3-28~~1~~2 Swimming Pool Repair and Maintenance Coating
8-3-28~~2~~3 Temperature-Indicator Safety Coating
8-3-28~~3~~4 Varnish
8-3-28~~4~~5 Waterproofing Concrete/Masonry Sealer
8-3-28~~5~~6 Waterproofing Sealer

8-3-300 STANDARDS

8-3-301 VOC Content Limits
8-3-302 Most Restrictive VOC Limits
8-3-303 Sell Through of Coatings
8-3-304 Painting Practices and Solvent Usage and Storage
8-3-305 Prohibition of Excess Thinning
8-3-306 Rust Preventative Coatings
8-3-307 Coatings Not Listed in Section 8-3-301, Tables 1 and 2
8-3-308 ~~Averaging Compliance Option~~
8-3-309 Limited Allowance, Industrial Maintenance Coatings

8-3-400 ADMINISTRATIVE REQUIREMENTS

8-3-401 Container Labeling Requirements
8-3-402 Petition, Limited Allowance for Industrial Maintenance Coatings

8-3-500 MONITORING AND RECORDS

8-3-501 Reporting Requirements
8-3-502 Sales Data

8-3-600 MANUAL OF PROCEDURES

8-3-601 Determination of Compliance, Air-Dried Water Reducible Coatings
8-3-602 Determination of Compliance, Air-Dried Solvent Based Coatings
8-3-603 Deleted November 21, 2001
8-3-604 Determination of Compliance, Low Solids Architectural Coatings
~~8-3-605 Determination of Compliance, Methacrylate Traffic Marking Coatings~~
8-3-60~~6~~5 Incorporated Test Methods
8-3-606 Alternative Test Methods
8-3-607 Calculation of VOC Content
8-3-608 Calculation of the Grams of VOC per liter for Low Solids Coatings
8-3-609 Calculation of the Grams of VOC per liter for All Other Architectural Coatings

REGULATION 8
ORGANIC COMPOUNDS
RULE 3
ARCHITECTURAL COATINGS

(Adopted March 1, 1978)

8-3-100 GENERAL

8-3-101 Description: The purpose of this Rule is to limit the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the District.

(Amended November 21, 2001)

8-3-102 Applicability: Except as provided in Section 8-3-110, this Rule is applicable to any person who supplies, sells, offers for sale, or manufacturers any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District.

(Adopted November 21, 2001)

8-3-103 Severability: If a court of competent jurisdiction issues an order that any provision of this rule is invalid, it is the intent of the Board of Directors of the District that other provisions of this rule remain in full force and affect, to the extent allowed by law.

(Adopted November 21, 2001)

8-3-110 Exemptions: This rule does not apply to:

110.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging;

110.2 Any aerosol coating product~~; or~~

~~110.3 Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less~~.

(Amended, Renumbered November 21, 2001)

8-3-111 Deleted November 21, 2001

8-3-112 Deleted January 8, 1986

8-3-113 Deleted November 21, 2001

8-3-114 Deleted November 21, 2001

8-3-115 Limited Exemption, Liter Containers: Except as provided in Section 8-3-502, the provisions of this Rule shall not apply to any architectural coating that is sold in a container with a volume of one (1.0) liter (1.057 quart) or less,

8-3-116 Limited Exemption, Early Compliance: Prior to January 1, 2011, any coating that meets the definition in Section 8-3-200 for a coating category listed in Section 8-3-301, Table 2 and complies with the applicable VOC limit in Section 8-3-301, Table 2 and with Sections 8-3-302.2 and 401 (including those provisions of Section 8-3-401 otherwise effective on January 1, 2011) shall be considered in compliance with this rule.

8-3-200 DEFINITIONS

8-3-201 Adhesive: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

(Adopted November 21, 2001)

8-3-202 Aerosol Coating Product: A pressurized coating product containing pigments or resins that dispense product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marking applications. Aerosol coating products are subject to District Regulation 8, Rule 49 or the provisions of 17 California Code of Regulations 94520 *et. seq.*

(Adopted November 21, 2001)

8-3-203 Aluminum Roof Coating: A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon). Pigment content shall be

determined in accordance with SCAQMD Method 318-95, incorporated by reference in Section 8-3-605.4.

~~**8-3-203 Antenna Coating:** A coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.~~ [Moved to Section 8-3-27~~0~~1]

~~*(Adopted November 21, 2001)*~~

~~**8-3-204 Antifouling Coating:** A coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq.*) and with the California Department of Pesticide Regulation.~~ [Moved to Section 8-3-27~~1~~2]

~~*(Adopted November 21, 2001)*~~

8-3-20~~5~~4 Appurtenances: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; raingutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

(Adopted November 21, 2001)

8-3-20~~6~~5 Architectural Coating~~s~~: A coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purpose of this rule.

(Amended, Renumbered November 21, 2001)

8-3-206 Basement Specialty Coating: A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces. Basement Specialty Coatings must meet the following criteria:

206.1 Coating must be capable of withstanding at least 10 psi of hydrostatic pressure, as determined in accordance with ASTM D7088-04, which is incorporated by reference in Section 8-3-605.11; and

206.2 Coating must be resistant to mold and mildew growth and must achieve a microbial growth rating of 8 or more, as determined in accordance with ASTM D3274-95, incorporated by reference in Section 8-3-605.18.

8-3-207 Bitumens: Black or brown materials including, but not limited to, asphalt, tar, pitch and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-208 Bituminous Roof Coating: A coating which incorporates bitumens that is labeled and formulated exclusively for roofing.

(Amended November 21, 2001)

8-3-209 Bituminous Roof Primer: A primer which incorporates bitumens that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing compounds.

(Amended November 21, 2001)

8-3-210 Bond Breaker~~s~~: A coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

~~**8-3-211 Clear Brushing Lacquers:** Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in subsection 8-3-401.5.~~ [Moved to Section 8-3-27~~2~~3]

~~*(Adopted November 21, 2001)*~~

~~**8-3-212 Clear Wood Coatings:** Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.~~ [Moved to Section 8-3-27~~3~~4]

~~*(Adopted November 21, 2001)*~~

8-3-21~~3~~1 **Coating:** A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

(Adopted November 21, 2001)

8-3-21~~4~~2 **Colorant:** A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(Adopted November 21, 2001)

8-3-21~~5~~3 **Concrete Curing Compound:** A coating labeled and formulated for application to freshly poured concrete to perform one or more of the following functions:

213.1 ~~r~~Retard the evaporation of water; or

213.2 Harden or dustproof the surface of freshly poured concrete.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-214 Concrete/Masonry Sealer: A clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:

214.1 Prevent penetration of water; or

214.2 Provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light; or

214.3 Harden or dustproof the surface of aged or cured concrete.

8-3-215 Driveway Sealer: A coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

215.1 Fill cracks; or

215.2 Seal the surface to provide protection; or

215.3 Restore or preserve the appearance of the driveway.

8-3-216 **Dry Fog Coating:** A coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

(Adopted November 21, 2001)

8-3-217 **Enamel:** A coating that is characterized by its ability to form a smooth surface. Enamel was originally associated with high gloss, but may also include lower degrees of gloss, i.e., flat enamels.

8-3-21~~7~~8 **Exempt Compound:** For purposes of this rule, a~~A~~ compound that has been identified by the US EPA as having ~~a~~ negligible ~~contribution to~~ photochemical reactivity~~. Compounds~~ and ~~exempt for the purposes of this Rule are~~ is listed in ~~subs~~Section 8-3-26~~13~~4.1.

(Adopted November 21, 2001)

8-3-21~~8~~9 **Faux Finishing Coating:** A coating labeled and formulated to meet one or more of the following criteria:

219.1 ~~as a stain or~~ A glaze or textured coating used to create artistic effects including, but not limited to~~,~~: dirt, suede, old age, smoke damage, and simulated marble and wood grain~~.~~; or

219.2 A decorative coating used to create a metallic, iridescent, or pearlescent appearance that contains at least 48 grams of pearlescent mica pigment or other iridescent pigment per liter of coating as applied (at least 0.4 pounds per gallon); or

219.3 A decorative coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter (less than 0.4 pounds per gallon) of coating as applied, when tested in accordance with SCAQMD Method 318-95, incorporated by reference in Section 8-3-605.4; or

219.4 A decorative coating used to create a metallic appearance that contains greater than 48 grams or elemental metallic pigment per liter (greater than 0.4 pounds per gallon) of coating as applied and that requires a clear topcoat to prevent the degradation of the finish under normal use conditions. The

metallic pigment content shall be determined in accordance with SCAQMD Method 318-95, incorporated by reference in Section 8-3-605.4; or

219.5 A clear topcoat to seal and protect a Faux Finishing coating that meets the requirements of Sections 6-3-219.1 through 219.4. These clear topcoats must be sold and used solely as part of a Faux Finishing coating system and must be labeled in accordance with Section 8-3-401.10.

(Adopted November 21, 2001)

8-3-2~~19~~20 **Fire-Resistive Coating:** A~~n opaque~~ coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The fire resistive category includes sprayed fire resistive materials and intumescent fire-resistive coating that are used to bring structural materials~~, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing assemblies of structural materials~~ into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency must be approved by building code officials. The fire-resistive coating shall be tested in accordance with ASTM Designation E 119-~~98~~07, incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.2. Fire resistive coatings and testing agencies must be approved by building code officials.

(Adopted November 21, 2001)

~~**8-3-220** **Fire-Retardant Coating:** A coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99, incorporated by reference in subsection 8-3-606.1.~~ [Moved to Section 8-3-27~~4~~5]

~~*(Renumbered 5/18/81; Amended, Renumbered 11/21/01)*~~

8-3-221 **Flat Coating:** A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.3.

(Adopted November 21, 2001)

8-3-222 **Floor Coating:** An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic.

(Adopted November 21, 2001)

~~**8-3-223** **Flow Coating:** A coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.~~ [Moved to Section 8-3-27~~5~~6]

~~*(Adopted November 21, 2001)*~~

8-3-22~~4~~3 **Form-Release Compound:** A coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some other material other than concrete.

(Adopted November 21, 2001)

8-3-22~~5~~4 **Graphic Arts Coating or Sign Paint:** A coating labeled and formulated for hand application by artists using brush, airbrush, or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.

(Amended, Renumbered 5/18/83, 11/21/01)

8-3-22~~6~~5 **High-Temperature Coating:** A high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(Adopted November 21, 2001)

8-3-22~~7~~6 **Industrial Maintenance Coating:** A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed in ~~subs~~Sections 8-3-22~~7~~6.1 through 22~~7~~6.5, and labeled as specified in ~~subs~~Section 8-3-401.4:

22~~7~~6.1 Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

22~~7~~6.2 Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;

22~~7~~6.3 ~~Repeated~~ Frequent exposure to temperatures above 121°C (250°F);

22~~7~~6.4 ~~Repeated (f~~Frequent~~)~~ heavy abrasion, including mechanical wear and ~~repeated (~~frequent~~)~~ scrubbing with industrial solvents, cleansers, or scouring agents; or

22~~7~~6.5 Exterior exposure of metal structures and structural components.

(Amended, Renumbered 5/18/83; Amended 1/8/86; Amended, Renumbered 11/21/01)

~~**8-3-228 Lacquer:** A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.~~ [Moved to Section 8-3-27~~6~~7]

~~*(Amended, Renumbered 5/18/83, 11/21/01)*~~

8-3-22~~9~~7 Low-Solids Coating: A coating containing 0.12 kilogram or less of solids per liter (~~1~~ one pound or less of solids per gallon) of coating material as recommended for application by the manufacturer. The VOC content for Low Solids Coatings shall be calculated in accordance with Section 8-3-~~607~~608.

(Adopted 11/4/98; Amended, Renumbered 11/21/01)

8-3-23~~0~~28 Magnesite Cement Coating: A coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(Adopted November 21,2001)

8-3-229 Manufacturer's Maximum Thinning Recommendation: The maximum recommendation for thinning that is indicated on the label or lid of the coating container.

8-3-23~~1~~0 Mastic Texture Coating: A coating labeled and formulated to cover holes and minor cracks, and to conceal surface irregularities, and applied in a single coat of at least 10 mils (at least 0.010 inch) dry film thickness.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-231 Medium Density Fiberboard (MDF): A composite wood product, panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat.

8-3-23~~21~~2 Metallic Pigmented Coating: A coating ~~containing~~ that is labeled and formulated to provide a metallic appearance. Metallic Pigmented Coatings must contain at least 48 grams of elemental metallic pigment (excluding zinc) per liter of coating as applied (at least 0.4 pounds per gallon), when tested in accordance with South Coast Air Quality Management District Method 318-95, incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.4. The Metallic Pigmented Coating category does not include coatings applied to roofs or Zinc-Rich Primers.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-23~~32~~3 Multi-Color Coating: A coating that is packaged in a single container and that is labeled and formulated to exhibit~~s~~ more than one color when applied in a single coat.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-23~~43~~4 Nonflat Coating: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.3.

(Adopted 9/1/82; Amended, Renumbered 11/21/01)

8-3-23~~54~~5 Nonflat – High Gloss Coating: A nonflat coating that registers a gloss of 70 or ~~above~~ greater on a 60 degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.3. Nonflat – High Gloss Coatings must be labeled in accordance with Section 8-3-401.9.

(Adopted November 21, 2001)

8-3-23~~65~~6 Non-Industrial Use: Non-industrial use means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including

petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

(Adopted November 21, 2001)

8-3-236~~6~~7 **Particleboard:** A composite wood product panel, molding, or other building material composed of cellulosic material (usually wood) in the form of discrete particles, as distinguished from fibers, flakes, or strands, which are pressed together with resin.

8-3-237~~7~~8 **Pearlescent:** Exhibiting various colors depending on the angles of illumination and viewing, as observed in mother-of-pearl.

8-3-238~~8~~9 **Plywood:** A panel product consisting of layers of wood veneers or composite core pressed together with resin. Plywood includes panel products made by either hot or cold pressing (with resin) veneer to a platform.

8-3-2~~37~~~~9~~40 **Post-Consumer Coating:** ~~A finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer, and does not include manufacturing wastes.~~ Finished coatings generated by a business or consumer that have served their intended end uses, and are recovered from or otherwise diverted from the waste stream for the purpose of recycling.

(Adopted November 21, 2001)

8-3-2~~38~~~~40~~01 **Pre-Treatment Wash Primer:** A primer that contains a minimum of 0.5 percent by acid, by weight, when tested in accordance with ASTM Designation D 1613-~~96~~06, incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.5, that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

(Adopted November 21, 2001)

8-3-2~~39~~~~41~~2 **Primer, Sealer, and Undercoater:** A coating labeled and formulated for application for one of more of the following purposes:

24~~1~~2.1 ~~to a substrate t~~To provide a firm bond between the substrate and subsequent coats;

24~~1~~2.2 To prevent subsequent coatings from being absorbed by the substrate;

24~~1~~2.3 To prevent harm to subsequent coatings by materials in the substrate;

24~~1~~2.4 To provide a smooth surface for the subsequent application of coatings;

24~~1~~2.5 To provide a clear finish coat to seal the substrate; or

24~~1~~2.6 To block materials from penetrating into or leaching out of a substrate.

(Adopted November 21, 2001)

~~**8-3-240 Quick Dry Enamel:** A nonflat coating that is labeled as specified in subsection 8-3-401.8 and that is formulated to have the following characteristics:~~

~~240.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16°C and 27°C (60°F and 80°F);~~

~~240.2 When tested in accordance with ASTM Designation D 1640-95, incorporated by reference in subsection 8-3-606.6, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical method test; and~~

~~240.3 Has a dried film gloss of 70 or above on a 60-degree meter.~~ [Moved to Section 8-3-27~~7~~8]

~~*(Adopted 9/1/82; Amended, Renumbered 5/18/83,11/21/01)*~~

~~**8-3-241 Quick Dry Primer, Sealer, and Undercoater:** A primer, sealer, or undercoater that is dry to touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ATSM D 1640-95, incorporated by reference in subsection 8-3-606.6.~~ [Moved to Section 8-3-27~~8~~9]

~~*(Adopted 5/18/83; Amended, Renumbered 11/21/01)*~~

8-3-24~~2~~3 **Reactive Penetrating Sealer:** A clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate. Reactive Penetrating Sealers line the pores of concrete and masonry substrates with a hydrophobic coating, but do not form a surface film. Reactive Penetrating Sealers must meet all of the following criteria:

24~~2~~3.1 The Reactive Penetrating Sealers must improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with one or more of the following standards, incorporated by reference in Section 8-3-605.19: ASTM C67-07, or ASTM C97-02, or ASTM C140-06; and

24~~2~~3.2 The Reactive Penetrating Sealer must not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M-05, incorporated by reference in Section 8-3-605.20; and

24~~2~~3.3 Products labeled and formulated for vehicular traffic surface chloride screening applications must meet the performance criteria listed in the National Cooperative Highway Research Report 244 (1981), incorporated by reference in Section 8-3-605.21.

The Reactive Penetrating Sealers must be labeled in accordance with Section 8-3-401.11.

8-3-24~~23~~4 **Recycled Coating:** An architectural coating formulated such that ~~not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.~~ it contains a minimum of 50 percent by volume post-consumer coating. with a maximum of 50 percent by volume secondary industrial materials or virgin materials.

(Adopted November 21,2001)

8-3-24~~3~~45 **Residential:** Areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

(Adopted November 21, 2001)

8-3-24~~4~~56 **Roof Coating:** A non-bituminous coating labeled and formulated ~~exclusively~~ for application to roofs for the primary purpose of preventing water penetration, ~~of the substrate by water or~~ reflecting ~~heat and~~ ultraviolet light, or reflecting solar radiation. ~~Metallic pigmented roof coatings which qualify as Metallic Pigmented Coating shall not be considered to be in this category, but shall be considered to be in the Metallic Pigmented Coating category.~~

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-24~~5~~67 **Rust Preventative Coating:** A coating formulated for non-industrial use to prevent the corrosion of metal surfaces for one or more of the following applications: ~~and labeled as specified in subsection 8-3-401.6.~~

24~~6~~7.1 Direct-to-metal coating; or

24~~6~~7.2 Coating intended for application over rusty, previously coated surfaces.

The Rust Preventative Coating category does not include the following:

24~~6~~7.3 Coatings that are required to be applied as a topcoat over a primer; or

24~~6~~7.4 Coatings that are intended for use on wood or any other non-metallic surface.

Rust Preventive Coatings are for metal substrates only and must be labeled as such, in accordance with the labeling requirements of Section 8-3-401.6.

(Adopted November 21, 2001)

~~**8-3-246** **Sanding Sealer:** A clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.~~ [Moved to Section 8-3-2~~79~~80]

~~*(Adopted November 21, 2001)*~~

~~**8-3-247** **Sealer:** A coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.~~ [Moved to Section 8-3-28~~0~~1]

~~*(Adopted November 21, 2001)*~~

8-3-248~~7~~8 Secondary Industrial Materials ~~Coating (Rework)~~: ~~A fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.~~ Products or by-products of the paint manufacturing process that are of known composition and have economic value but can no longer be used for their intended purpose.

(Adopted November 21, 2001)

8-3-248~~9~~ Semitransparent Coating: A coating that contains binders and colored pigments and is formulated to change the color of the surface, but not conceal the grain pattern or texture.

8-3-24~~49~~50 Shellac: A clear or opaque coating formulated solely with the resinous secretions of the lac beetle (Laccifer lacca)~~, thinned with alcohol,~~ and formulated to dry by evaporation without a chemical reaction.

(Amended, Renumbered 5/18/83, 11/21/01)

8-3-25~~0~~1 Shop Application: Application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

(Adopted November 21, 2001)

8-3-25~~1~~2 Solicit: To require for use or to specify, by written or oral contract.

(Adopted November 21, 2001)

8-3-25~~2~~3 Solvent: Any VOC-containing fluid used to perform cleaning operations or as a reducer.

8-3-25~~23~~4 Specialty Primer, Sealer and Undercoater: A coating ~~labeled as specified in subsection 8-3-401.7 and~~ that is formulated for application to a substrate to ~~seal~~ block water-soluble stains resulting from: fire damage, smoke damage, or water damage.~~; to condition excessively chalky surfaces; or to block stains.~~ Specialty Primers, Sealers, and Undercoaters must be labeled in accordance with Section 8-3-401.7. Until January 1, 2011, the Specialty Primer, Sealer, and Undercoating category includes coatings formulated to seal excessively chalky surfaces. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-98, incorporated by reference in ~~subs~~Section 8-3-60~~6~~5.7.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-25~~34~~5 Stain: A ~~clear~~transparent, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.

(Renumbered 5/18/83; Amended, Renumbered 11/21/01)

8-3-25~~5~~6 Stone Consolidant: A coating that is labeled and formulated for application to stone substrates to repair historic structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants must penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants must be specified and used in accordance with ASTM E2167-01, incorporated by reference in Section 8-3-605.22. Stone Consolidants are for professional use only and must be labeled as such, in accordance with the labeling requirements in Section 8-3-401.12.

8-3-25~~46~~7 Swimming Pool Coating: A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

(Adopted November 21, 2001)

~~**8-3-255 Swimming Pool Repair and Maintenance Coating:** A rubber based coating labeled and formulated to be used over existing rubber based coatings for the repair and maintenance of swimming pools.~~ [Moved to Section 8-3-28~~1~~2]

~~*(Adopted November 21, 2001)*~~

~~**8-3-256 Temperature-Indicator Safety Coating:** A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).~~ [Moved to Section 8-3-28~~2~~3]

~~*(Adopted November 21, 2001)*~~

8-3-25~~7~~8 **Tint Base:** An architectural coating to which colorant is added after packaging in sale units to produce a desired color.

(Adopted November 21, 2001)

8-3-25~~8~~9 **Traffic Marking Coating:** A coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to curbs, berms, driveways, parking lots, sidewalks, and airport runways.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-2~~59~~60 **Tub and Tile Refinish Coating:** A clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. Tub and Tile Refinish Coatings must meet all of the following criteria:

2~~59~~60.1The coating must have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder. This must be determined on bonderite 1000, in accordance with ASTM D3363-05, incorporated by reference in Section 8-3-605.14.

2~~59~~60.2The coating must have a weight loss of 20 milligrams or less after 1000 cycles. This must be determined with CS-17 wheels on bonderite 1000, in accordance with ASTM D4060-07, incorporated by reference in Section 8-3-605.15;

2~~59~~60.3The coating must withstand 1000 hours or more of exposure with few or no #8 blisters. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99 and ASTM D714-02e1, incorporated by reference in Section 8-3-605.16; and

2~~59~~60.4The coating must have an adhesion rating of 4B or better after 24 hours of recovery. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99 and ASTM D3359-02, incorporated by reference in Section 8-3-607.13.

8-3-2~~59~~6~~0~~1 **Undercoater:** A coating labeled and formulated to provide a smooth surface for subsequent coats.

(Adopted November 21, 2001)

~~**8-3-260 Varnish:** A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.~~ [Moved to Section 8-3-28~~3~~4]

~~*(Amended, Renumbered 5/18/83; Amended 1/8/86; Amended, Renumbered 11/21/01)*~~

8-3-26~~1~~2 **Veneer:** Thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as plywood, laminated veneer lumber, or other products.

8-3-26~~2~~3 **Virgin Materials:** Material that contain no post-consumer coatings or secondary industrial materials.

8-3-26~~13~~4 **Volatile Organic Compound (VOC):** Any organic compound (excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate) which would be emitted during use, application, curing or drying of an architectural coating.

26~~13~~4.1Except as provided in Section 8-3-26~~3~~4.2, f~~F~~or the purpose~~s~~ of calculating VOC content of a coating, any water or the following non-precursor organic compounds:

acetone
methyl acetate
parachlorobenzotrifluoride (PCBTF)
cyclic, branched or linear, completely methylated siloxanes (VMS)

shall not be considered to be part of the coating.

26~~13~~4.2For the purposes of calculating VOC content of a low solids coating, any water or non-precursor organic compound listed in ~~subs~~Section 8-3-26~~13~~4.1 shall be considered part of the coating, but shall not be considered part of the VOC content of the coating.

(Adopted 12/20/95; Amended 11/4/98; Amended, Renumbered 11/21/01)

8-3-26~~2~~4~~5~~ **VOC Content:** The ~~calculation to determine the content of~~ VOC content of a coating ~~is found in the Manual of Procedures, Volume III, Laboratory Methods 21, 22 and 31~~as calculated pursuant to Section 8-3-607.

(Adopted November 21, 2001)

8-3-26~~5~~6: **Waterproofing Membrane:** A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate. Waterproofing Membranes are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. Waterproofing Membranes must meet the following criteria:

26~~5~~6.1 Coating must be applied in a single coat of at least 25 mils (at least 0.025 inch) dry film thickness; and

26~~5~~6.2 Coatings must meet or exceed the requirements contained in ASTM C836-06, incorporated by reference in Section 8-3-605.17.

The Waterproofing Membranes category does not include topcoats that are included in the Concrete/Masonry Sealer category (e.g., parking deck topcoats, pedestrian deck topcoats, etc.).

8-3-26~~6~~7 **Wood Coatings:** Coatings labeled and formulated for application exclusively to wood substrates only. The Wood Coatings category includes the following clear and semitransparent coatings: lacquers, varnishes, sanding sealers, penetrating oils; clear stains; wood conditioners used as undercoats, and wood sealers used as topcoats. The Wood Coatings category also includes the following opaque wood coatings: opaque lacquers, opaque sanding sealers, and opaque lacquer undercoaters. The Wood Coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces, or coatings intended for substrates other than wood. Wood Coatings must be labeled "For Wood Substrates Only," in accordance with Section 8-3-401.13.

~~**8-3-263** **Waterproofing Sealer:** A coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.~~ [Moved to Section 8-3-28~~5~~6]

~~(Amended, Renumbered 5/18/83, 11/21/01)~~

~~**8-3-264** **Waterproofing Concrete/Masonry Sealer:** A clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.~~ [Moved to Section 8-3-28~~4~~5]

~~*(Adopted November 21, 2001)*~~

8-3-26~~5~~~~7~~8 **Wood Preservative:** A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (U.S.C.) Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-26~~8~~9 **Wood Substrate:** A substrate made of wood, particleboard, plywood, medium density fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood Substrate does not include any item comprised of simulated wood.

8-3-2~~69~~70 **Zinc-Rich Primer:** A coating that meets all of the following specifications:

2~~69~~70.1 Contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids; and

2~~69~~70.2 Formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings; and

2~~69~~70.3 Intended for professional use only and is labeled as such, in accordance with the labeling requirements in Section 8-3-401.14.

8-3-27~~0~~1 **Antenna Coating:** A coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-27~~1~~2 **Antifouling Coating:** A coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the

coating must be registered with both the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq.*) and with the California Department of Pesticide Regulation. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-27~~2~~3 Clear Brushing Lacquers: Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in Section 8-3-401.5. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-27~~3~~4 Clear Wood Coatings: Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-27~~4~~5 Fire-Retardant Coating: A coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-07, incorporated by reference in Section 8-3-605.1. Effective January 1, 2011, coatings with fire retardant properties will be subject to the VOC limit of their primary category, (e.g., Flat, Nonflat, etc.). Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Renumbered 5/18/81; Amended, Renumbered 11/21/01)

8-3-27~~5~~6 Flow Coating: A coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-27~~6~~7 Lacquer: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Amended, Renumbered 5/18/83, 11/21/01)

8-3-27~~7~~8 Quick-Dry Enamel: A nonflat coating that is labeled as specified in Section 8-3-401.8 and that is formulated to have the following characteristics:

27~~7~~8.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16°C and 27°C (60°F and 80°F);

27~~7~~8.2 When tested in accordance with ASTM Designation D 1640-95, incorporated by reference in Section 8-3-605.6, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical method test; and

27~~7~~8.3 Has a dried film gloss of 70 or above on a 60-degree meter.

Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted 9/1/82; Amended, Renumbered 5/18/83,11/21/01)

8-3-27~~8~~9 Quick Dry Primer, Sealer, and Undercoater: A primer, sealer, or undercoater that is dry to touch in 30 minutes and can be recoated in 2 hours when tested in

accordance with ATSM D 1640-95, incorporated by reference in Section 8-3-607.6. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted 5/18/83; Amended, Renumbered 11/21/01)

8-3-27~~79~~80 Sanding Sealer: A clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-28~~0~~01 Sealer: A coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-28~~1~~2 Swimming Pool Repair and Maintenance Coating: A rubber based coating labeled and formulated to be used over existing rubber based coatings for the repair and maintenance of swimming pools. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-28~~2~~3 Temperature-Indicator Safety Coating: A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F). Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-28~~3~~4 Varnish: A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Amended, Renumbered 5/18/83; Amended 1/8/86; Amended, Renumbered 11/21/01)

8-3-28~~4~~5 Waterproofing Concrete/Masonry Sealer: A clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Adopted November 21, 2001)

8-3-28~~5~~6 Waterproofing Sealer: A coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water. Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in 8-3-301, Table 2, except as provided in Section 8-3-302.

(Amended, Renumbered 5/18/83; 11/21/01)

8-3-300 STANDARDS

8-3-301 VOC Content Limits: Except as provided in Sections 8-3-302, 303, 307, and 30~~8~~9, no person shall: (i) manufacture, blend, or repackage for sale within the District; (ii) supply, sell, or offer for sale within the District; or (iii) solicit for application or apply within the District, any architectural coating with a VOC content, as calculated pursuant to Section 8-3-607, in excess of the corresponding limit specified in the

following tables. Limits are expressed in grams of VOC per liter of coating as thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to the tint bases, except that, for low solids coatings, the volume of water and exempt compounds is not excluded. ~~"Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.~~

~~Coating Category~~	~~Limit~~	~~Effective 1/1/2003~~	~~Effective 1/1/2004~~
~~**Flat Coatings**~~	~~250~~	~~100~~	
~~**Nonflat Coatings**~~	~~250~~	~~150~~	
~~**Nonflat – High Gloss Coatings**~~	~~250~~		
~~**Specialty Coatings:**~~			
~~Antenna Coatings~~	~~530~~		
~~Antifouling Coatings~~	~~420~~	~~400~~	
~~Bituminous Roof Coatings~~	~~300~~		
~~Bituminous Roof Primers~~	~~350~~		
~~Bond Breakers~~	~~600(2)~~	~~350~~	
~~Clear Wood Coatings:~~			
~~– Clear Brushing Lacquer~~	~~680~~		
~~– Lacquer (including lacquer – sanding sealer)~~	~~680~~	~~550(1)~~	
~~– Sanding sealer~~	~~550~~	~~350~~	
~~– Varnish~~	~~350~~		
~~Concrete Curing Compounds~~	~~350~~		
~~Dry Fog Coatings~~	~~400(2)~~		
~~Faux Finishing Coatings~~	~~350~~		
~~Fire Resistive Coatings~~	~~450(2)~~	~~350~~	
~~Fire Retardant Coatings:~~			
~~– Clear~~	~~850(2)~~	~~650~~	
~~– Opaque~~	~~450(2)~~	~~350~~	
~~Floor Coatings~~	~~400~~	~~250~~	
~~Flow Coatings~~	~~420~~		
~~Form Release Compounds~~	~~250~~		
~~Graphic Arts Coatings (Sign Paints)~~	~~500(2)~~		
~~High Temperature Coatings~~	~~420~~		
~~Industrial Maintenance Coatings~~	~~420~~		~~250~~
~~Low Solids Coatings~~	~~120~~		
~~Magnesite Cement Coatings~~	~~450~~		
~~Mastic Texture Coatings~~	~~300(2)~~		
~~Metallic Pigmented Coatings~~	~~500(2)~~		
~~Multi-Color Coatings~~	~~580(2)~~	~~250~~	
~~Pre-Treatment Wash Primers~~	~~420~~		
~~Primers, Sealers, and Undercoaters~~	~~350~~	~~200~~	
~~Quick-Dry Enamels~~	~~400~~	~~250~~	
~~Quick-Dry Primers, Sealers, Undercoaters~~	~~450(2)~~	~~200~~	
~~Recycled Coatings~~	~~250~~		
~~Roof Coatings~~	~~250(2)~~		
~~Rust Preventative Coatings~~	~~420~~	~~400~~	
~~Shellacs:~~			
~~– Clear~~	~~730(2)~~		
~~– Opaque~~	~~550(2)~~		
~~Specialty Primers, Sealers and Undercoaters~~	~~350~~		
~~Stains~~	~~350~~	~~250~~	
~~Swimming Pool Coatings~~	~~600(2)~~	~~340~~	

~~Coating Category~~	~~Limit~~	~~Effective 1/1/2003~~	~~Effective 1/1/2004~~
~~Swimming Pool Repair and Maintenance Coatings~~	~~600(2)~~	~~340~~	
~~Temperature-Indicator Safety Coatings~~	~~550~~		
~~Traffic Marking Coatings~~	~~250~~	~~150~~	
~~Waterproofing Concrete/Masonry Sealers~~	~~400~~		
~~Waterproofing Sealers~~	~~400~~	~~250~~	
~~Wood Preservatives:~~			
~~Above ground~~	~~350~~		
~~Below ground~~	~~550(2)~~	~~350~~	

Table 1 shall be effective until January 1, 2011:

TABLE 1

Coating Category	Limit
Flat Coatings	100
Nonflat Coatings	150
Nonflat – High Gloss Coatings	250
Specialty Coatings:	
Antenna Coatings	530
Antifouling Coatings	400
Bituminous Roof Coatings	300
Bituminous Roof Primers	350
Bond Breakers	350
Clear Wood Coatings:	
Clear Brushing Lacquer	680
Lacquer (including lacquer sanding sealer)	550(1)
Sanding sealer	350
Varnish	350
Concrete Curing Compounds	350
Dry Fog Coatings	400
Faux Finishing Coatings	350
Fire Resistive Coatings	350
Fire Retardant Coatings:	
Clear	650
Opaque	350
Floor Coatings	250
Flow Coatings	420
Form-Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low Solids Coatings	120
Magnesite Cement Coatings	450
Mastic Texture Coatings	300
Metallic Pigmented Coatings	500
Multi-Color Coatings	250
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Quick-Dry Enamels	250
Quick-Dry Primers, Sealers, Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventative Coatings	400

Coating Category	Limit
Shellacs:	
Clear	730
Opaque	550
Specialty Primers, Sealers and Undercoaters	350
Stains	250
Swimming Pool Coatings	340
Swimming Pool Repair and Maintenance Coatings	340
Temperature-Indicator Safety Coatings	550
Traffic Marking Coatings	150
Waterproofing Concrete/Masonry Sealers	400
Waterproofing Sealers	250
Wood Preservatives:	
Above ground	350
Below ground	350

(1) A person may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish provided that, (i) the relative humidity at the time of coating application is greater than 70%, (ii) the temperature at the time of coating application is below 18°C (65°F), (iii) the lacquer contains acetone, and (iv) the lacquer contains no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition.

~~(2) VOC limit effective April 1, 2002.~~

Table 2 shall be effective on and after January 1, 2011:

TABLE 2

Coating Category:	VOC Limit (g/l) Effective Dates	
	1/1/2011	1/1/2012
Flat Coatings	50	
Nonflat Coatings	100	
Nonflat – High Gloss Coatings	150	
Specialty Coatings		
Aluminum Roof	400	
Basement Specialty Coatings	400	
Bituminous Roof Coatings	50	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealer	50	
Dry Fog Coatings	150	
Faux Finishing Coatings	350	
Fire Restive Coatings	350	
Floor Coatings	100	
Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	100	

Coating Category:	VOC Limit (g/l) Effective Dates	
	1/1/2011	1/1/2012
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	100	
Reactive Penetrating Sealer	350	
Recycled Coatings	250	
Roof Coatings	50	
Rust Preventative Coatings	400	250
Shellacs: Clear Shellacs: Opaque	730 550	
Specialty Primers, Sealers and Undercoaters	350	100
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	100	
Tub and Tile Refinish Coatings	420	
Waterproofing Membranes	250	
Wood Coatings	275	
Wood Preservatives	350	
Zinc-Rich Primer	340	

(Amended 9/1/82, 5/18/83, 1/8/86, 9/3/86, 11/4/98; Amended, Renumbered 11/21/01)

8-3-302 Most Restrictive VOC Limits:

302.1 Effective until January 1, 2011, if anywhere on the container of any architectural coating or any label or sticker affixed to the container, or in any sales, advertising or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the table in Section 8-3-301, then the most restrictive VOC limit shall apply. This Section does not apply to the following coating categories:

1.1: Antenna coatings,
1.2: Antifouling coatings,
1.3: Bituminous roof coatings,
1.4: Fire-retardant coatings,
1.5: Flow coatings,
1.6: High temperature coatings,
1.7: Industrial maintenance coatings,
1.8: Lacquer coatings (including lacquer sanding sealers),
1.9: Low-solids coatings,
1.10: Metallic pigmented coatings,
1.11: Pretreatment wash primers,
1.12: Shellacs,
1.13: Specialty primers, sealers and undercoaters,
1.14: Temperature-indicator safety coatings, and
1.15: Wood preservatives.

302.2 Effective January 1, 2011, if a coating meets a definition listed in Section 8-3-200 for one or more specialty coating categories that are listed in Section 8-3-301, Table 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limits for the applicable specialty coating listed in Section 8-3-301,

Table 2. With the exception of the specialty coating categories specified in Sections 8-3-302.2.1 through 302.2.12, if a coating is recommended for use in more than one of the specialty coating categories, then the most restrictive limit shall apply. This requirement applies to usage recommendations that appear anywhere on the coating container, any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf:

2.1: Aluminum roof coatings,
2.2: Bituminous roof primers,
2.3: High temperature coatings,
2.4: Industrial maintenance coatings,
2.5: Low-solids coatings,
2.6: Metallic pigmented coating,
2.7: Pretreatment wash primers,
2.8: Shellacs,
2.9: Specialty primers, sealers, and undercoaters,
2.10: Wood coatings,
2.11: Wood preservatives,
2.12: Zinc-rich primers

(Adopted 4/17/86; Amended 1/8/86; Amended, Renumbered 11/21/01)

8-3-303 **Sell-Through of Coatings:** Any coating manufactured prior to the ~~January 1, 2003 or January 1, 2004~~ effective date specified for that coating in Section 8-3-301, Table 2 ~~that does not comply with the VOC limits effective on those dates~~ may be supplied, offered for sale, or sold for up to three years after the effective dates provided that (i) the coating was in compliance with the VOC limits in effect at the time of manufacture, and (ii) the date or date-code is displayed on the coating container as required by ~~subs~~Section 8-3-401.1. Any coating subject to this Section may be applied at any time both before and after the specified effective dates.

~~303.1 Until January 1, 2008, any coating included in an approved Averaging Program that does not comply with the VOC limits in Section 8-3-301 may be supplied, offered for sale or sold for up to three years after the end of the compliance period specified in the approved Averaging Program provided that either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board is displayed on the coating container. Any coating subject to this subsection may be applied at any time after the period specified in the Averaging Program.~~

(Adopted November 21, 2001)

8-3-304 **Painting Practices and Solvent Usage and Storage:** ~~All architectural coating containers shall: be closed when not in use.~~ Any person using organic solvent for surface preparation and cleanup or mixing, using or disposing of coating or stripper containing organic solvent:

304.1 Shall close containers used for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup when not in use;
304.2 Shall close containers of fresh or spent solvent, coating, catalyst, thinner reducer, or solvent when not in use; and
304.3 Shall not use organic compounds for the cleanup of spray equipment, including paint lines, unless equipment for collecting the organic compounds and minimizing their evaporation to the atmosphere is used.

"In use" is the active application of contents to a surface by pouring, siphoning, brushing, rolling, padding, ragging or other means. Architectural coating containers include but are not limited to, drums, buckets, cans, pails, trays and any other application containers. ~~Containers of any VOC-containing materials used for thinning or cleanup shall also be closed when not in use.~~

(Adopted November 21, 2001)

8-3-305 **Prohibition of Excess Thinning:** No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Section 8-3-301.

(Adopted November 21, 2001)

8-3-306 **Rust Preventative Coatings:** Effective until ~~January 1, 2004~~ January 1, 201~~1~~2, ~~a~~ no person shall ~~only~~ apply ~~and~~ or solicit the application of any rust preventative coating~~s~~ for other than non-industrial use~~s~~, unless such ~~such~~ coating~~s~~ compl~~y~~ies with the VOC limit for industrial maintenance coating as specified in Section 8-~~45~~3-301.

(Adopted November 21, 2001)

8-3-307 **Coatings Not Listed in Section 8-3-301:** Any coating that does not meet any of the definitions for a specialty coating listed in Section 8-3-301, Table 1 or 2 shall be classified as a flat, nonflat or nonflat high gloss coating, based on it~~'~~s gloss, as defined in Section 8-3-22~~1~~31, 23~~43~~34 or 23~~57~~75, and the corresponding VOC limit in Section 8-3-301, Table 1 or 2 shall apply.

(Adopted November 21, 2001)

~~**8-3-308**~~ ~~**Averaging Compliance Option:** Effective January 1, 2003, in lieu of compliance with the specified VOC limits in Section 8-3-301, any of the following coatings may be averaged by the manufacturer such that their actual cumulative emissions over a compliance period not to exceed one year, as calculated from sales of the designated coatings, are less than or equal to the cumulative emissions that would have been allowed under the specified VOC limits, provided that, (i) the manufacturer complies with the provisions of the Manual of Procedures, Volume I, Number 7, and, (ii) the manufacturer maintains and makes available inspection records for at least three years after the end of each compliance period:~~

~~307.1 Bituminous roof coatings,~~
~~307.2 Flats,~~
~~307.3 Floor coatings,~~
~~307.4 Industrial maintenance coatings,~~
~~307.5 Nonflats,~~
~~307.6 Primers, sealers, and undercoaters,~~
~~307.7 Quick-dry enamels,~~
~~307.8 Quick-dry primers, sealers, and undercoaters,~~
~~307.9 Roof coatings,~~
~~307.10 Rust preventative coatings,~~
~~307.11 Stains, and~~
~~307.12 Waterproofing sealers.~~

~~This Section and Volume I, Number 7 of the Manual of Procedures: Averaging Provision for Archtectural Coatings, shall be effective only until January 1, 2005, after which this compliance option shall no longer be allowed.~~

(Adopted November 21, 2001)

8-3-309 **Limited Allowance, Industrial Maintenance Coatings:** Effective January 1, 2004, industrial maintenance coatings with a VOC content of greater than 250 grams VOC per liter but no greater than 340 grams VOC per liter may be manufactured, sold, offered for sale, solicited, and applied in the District provided the user of the coating, or manufacturer or seller on behalf of the user, has petitioned the APCO for use of the coating as per Section 8-3-402 and has received written approval. The APCO shall not approve any petition if the approval, when combined with approvals granted previously during the calendar year, would result in excess emissions of greater than 10 tons per year. Excess emissions are emissions greater than those that would result from an equal volume of coating at the VOC limit of 250 grams per liter. This Section shall not apply to industrial maintenance coatings offered for sale to the general public.

(Adopted November 21, 2001)

8-3-400 **ADMINISTRATIVE REQUIREMENTS**

8-3-401 **Container Labeling Requirements:** Each container for any coating subject to this Rule shall display all the information in ~~subs~~Section 8-3-401.1 through 401.3, and, as applicable, the information in ~~subs~~Section 8-3-401.4 through 401.9:

401.1 Date Code: ~~On the label, lid or bottom; t~~The date the coating was manufactured, or a date code representing the date shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code, an explanation of each code must be filed with the Executive Officer of the Air

Resources Board and be made available to the Air Pollution Control Officer on request.

401.2 Thinning Recommendation: ~~On the label or lid; a~~ A statement of the manufacturer's recommendation regarding thinning of the coating so as not to exceed the VOC limit listed in Section 8-3-301 shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of coatings with water. If thinning prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

401.3 VOC Content: ~~On the container; the maximum or actual VOC content of the coating, as supplied, including the VOC content at maximum thinning as recommended by the manufacturer. VOC content shall be displayed as grams VOC per liter of coating. VOC content may be calculated using product formulation data or shall be determined using the test method specified in Section 8-3-601, 602 or 604.~~

Each container of any coating subject to this rule shall display one of the following values in grams of VOC per liter of coating:

3.1 Maximum VOC content as determined from all potential product formulations; or

3.2 VOC content as determined from actual formulation data: or

3.3 VOC content as determined using the applicable test methods in Sections 8-3-601 through 605.

3.4 If the manufacturer does not recommend thinning, the container must display the VOC content, as supplied.

3.5 If the manufacturer recommends thinning, the container must display the VOC content including the maximum amount of thinning solvent recommended by the manufacturer.

3.6 Effective January 1, 2011, if the coating is a multi-component product, the container must display the VOC content as mixed or catalyzed.

3.7 Effective January 1, 2011, if the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.

401.4 Industrial Maintenance Coatings: Until January 1, 2011, ~~O~~on the label or lid; one or more of the following: (i) "For Industrial Use Only," (ii) "For Professional Use Only," (iii) "Not For Residential Use," or (iv) "Not Intended For Residential Use" shall be prominently displayed. Effective January 1, 2011, the labels of all industrial maintenance coatings shall prominently display the statement "For industrial use only" or "For professional use only."

401.5 For Clear Brushing Lacquers: ~~Effective January 1, 2003~~ Until January 1, 2011, "For Brush Application Only," and "This Product Must Not Be Thinned Or Sprayed" shall be prominently displayed on the label.

401.6 For Rust Preventative Coatings: ~~Effective January 1, 2003,~~ "For Metal Substrates Only" shall be prominently displayed on the label.

401.7 For Specialty Primers, Sealers, and Undercoaters: Until ~~January 1, 2003~~ January 1, 2011, one of the following: (i) For Blocking Stains, (ii) For Fire-Damaged Substrates, (iii) For Smoke-Damaged Substrates, (iv) For Water-Damaged Substrates, or, (v) For Excessively Chalky Surfaces shall be prominently displayed on the label.

401.8 For Quick Dry Enamels: ~~Effective January 1, 2003~~ Until January 1, 2011, "Quick Dry" and the dry hard time shall be prominently displayed on the label.

401.9 For Nonflat – High Gloss Coatings: ~~Effective January 1, 2003,~~ "High Gloss" shall be prominently displayed on the label.

401.10 For Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat sold as part of a Faux Finishing Coating system shall ~~be~~ prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system."

401.11 For Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer."

401.12 For Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant – For Professional Use Only."

401.13 For Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only."

401.14 For Zinc Rich Primers: Effective January 1, 2011, the labels of all Zinc Rich Primers shall prominently display the statement "For Industrial Use Only" or "For Professional Use Only."

(Amended 3/17/82, 12/1/82, 5/18/83, 1/8/86; Amended, Renumbered 11/21/01)

8-3-402 **Petition, Limited Allowance for Industrial Maintenance Coatings:** A person seeking to use the limited allowance for industrial maintenance coatings as per Section 8-3-309 shall comply with the following requirements:

402.1 The petitioner shall certify that complying coatings able to meet the job performance requirements are not available.

402.2 The petition shall contain the following information, as applicable: (i) job requirements, and job and site description, (ii) volume of coating required, and, (iii) maximum VOC content of coating to be applied.

402.3 If the APCO grants written approval, the approval shall contain volume and allowable VOC content conditions. Until written approval is granted and received by the petitioner, all provisions of this Rule shall apply.

(Adopted November 21, 2001)

8-3-500 MONITORING AND RECORDS

~~**8-3-501**~~ ~~**Reporting Requirements:** Each manufacturer of the following products shall submit a report to the Executive Officer of the California Air Resources Board on or before April 1 of each calendar year beginning in the year 2004. The report shall contain the following information for the preceding calendar year, but need only be submitted once each year for all districts:~~

~~501.1 Number of gallons of clear brushing lacquers sold in California and the method used to calculate California sales.~~

~~501.2 umber of gallons of rust preventative coatings sold in California and the method used to calculate California sales.~~

~~501.3 Number of gallons of specialty primers, sealers and undercoaters as defined in Section 8-3-252 sold in California and the method used to calculate California sales.~~

~~501.4 For coatings that contain methylene chloride or perchloroethylene, (i) product brand name and a copy of product label with legible usage instructions, (ii) product category as defined by this Rule to which the product belongs, (iii) total sales in California during the calendar year to the nearest gallon, and (iv) volume percentage, to the nearest 0.10%, of methylene chloride or perchloroethylene in the coating.~~

~~501.5 Number of gallons of recycled coatings distributed in California and the method used to calculate California distribution. In addition, each manufacturer shall submit a certification of their status as a Recycled Paint Manufacturer, but need only submit a certification once.~~

~~501.6 Number of gallons of bituminous roof coatings and bituminous roof primers sold in California and the method used to calculate California sales.~~

(Adopted November 21, 2001)

8-3-502 **Sales Data**: A responsible official from each manufacturer shall, upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. The responsible official shall within 180 days provide information including, but not limited to:

502.1 The name and mailing address of the manufacturer;

502.2 The name, address and telephone number of a contact person;

502.3 The name of the coating products as it appears on the label and the applicable coating category;

502.4 Whether the product is marketed for interior or exterior use or both;

502.5 The number of gallons sold in California in containers greater than one liter (1.057 quarts) and equal to or less than one liter (1.057 quart);

502.6 The VOC Actual content and VOC Regulatory content in grams per liter. VOC Actual is calculated according to the equation in Section 8-3-~~607~~608 for all coatings. VOC Regulatory is calculated according to the equation in Section 8-3-~~608~~609, except for low-solids coatings, which is also determined according to Section 8-3-608. If thinning is recommended, list the VOC Actual content and VOC regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed;

502.7 The names and CAS numbers of the VOC constituents in the product;

502.8 The names and CAS numbers of any compounds in the product specifically exempted from the VOC definition, as listed in Section 8-3-26~~3~~4;

502.9 Whether the product is marketed as solventborne, waterborne, or 100 percent solids;

502.10 Description of resin or binder in the product;

502.11 Whether the coating is a single-component or multi-component product;

502.12 The density of the product in pounds per gallon;

502.13 The percent by weight of solids, all volatile materials, water, and any compound in the product specifically exempted from the VOC definition, as listed in Section 8-3-26~~3~~4;

502.14 The percent by volume of solids, all volatile materials, water, and any compound in the product specifically exempted from the VOC definition, as listed in Section 8-3-26~~3~~4;

All sales data listed in Section 8-3-502.1 through 502.14 shall be maintained by the responsible official for a minimum of three years. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Section 91000-91022.

8-3-600 MANUAL OF PROCEDURES

8-3-601 Determination of Compliance, Air-Dried Water Reducible Coatings: The means by which compliance of air-dried, water reducible coatings is determined are found in the Manual of Procedures, Volume III, Method 21.

(Amended 3/17/82, 5/18/83)

8-3-602 Determination of Compliance, Air-Dried Solvent Based Coatings: The means by which compliance of air-dried, solvent based coatings is determined are found in the Manual of Procedures, Volume III Method 22.

(Amended 3/17/82, 5/18/83)

8-3-603 Deleted November 21, 2001

8-3-604 Determination of Compliance, Low Solids Architectural Coatings: The means by which compliance of low solids architectural coatings is determined are found in the Manual of Procedures, Volume III, Method 31.

(Adopted November 4, 1998)

~~**8-3-605 Determination of Compliance, Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. Environmental Protection Agency Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.~~

(Adopted November 21, 2001)

8-3-60~~6~~5 Incorporated Test Methods: The following test methods are incorporated by reference herein, and shall be used to test coatings subject to provisions of this Rule:

60~~6~~5.1 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-~~99~~07, "Standard Test Method for Surface Burning Characteristics of Building Materials," (see Section 8-3-~~220~~ 27~~4~~5, Fire-Retardant Coating).

60~~6~~5.2 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-~~98~~07, "Standard Test Methods for Fire Tests of Building Construction Materials," (see Section 8-3-~~219~~220, Fire-Resistive Coating).

60~~6~~5.3 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss," (see Sections 8-3-221, ~~234233,~~ ~~235~~234, 235, and ~~240277~~278, Flat Coating, Nonflat Coating, Nonflat High Gloss Coating, and Quick-Dry Enamels).

60~~6~~5.4 Metal Content of Coatings: The metallic content of a coating shall be determined by South Coast Air Quality Management District Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples," (see Section 8-3-219, Faux Finishing Coating or Section 8-3-~~232231~~232, Metallic Pigmented Coating).

60~~6~~5.5 Acid Content of Coatings: Measurement of acid content of Pre-Treatment Wash Primers shall be determined by ASTM Designation D 1613-~~96~~06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," (see Section 8-3-~~238~~24~~0~~1, Pre-Treatment Wash Primers).

60~~6~~5.6 Drying Times: The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature, " (see Sections 8-3-~~240280~~278 and ~~241281~~279, Quick-Dry Enamel and Quick-Dry Primer, Sealer, and Undercoater). The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.

60~~6~~5.7 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films," (see Section 8-3-~~252253~~254, Specialty Primer, Sealer, and Undercoater).

60~~6~~5.8 Exempt Compounds – Siloxanes: The quantity of cyclic, branched, or linear completely methylated siloxanes shall be analyzed by the Manual of Procedures, Volume III, Laboratory Method 43: "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," (see Section 8-3-~~2613~~264, Volatile Organic Compound).

60~~6~~5.9 Exempt Compounds – Parachlorobenzotrifluoride (PCBTF): The quantity of parachlorobenzotrifluoride shall be analyzed by the Manual of Procedures, Volume III, Laboratory Method 41, "Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride (see Section 8-3-~~261263~~264, Volatile Organic Compound).

60~~6~~5.10 Exempt Compounds – Methyl Acetate: The quantity of methyl acetate shall be determined by ASTM Method D-6133-00: "Standard Test Method for Acetone, PCBTF, Methyl Acetate or t-Butyl Acetate Content of Solvent-Reducible and Water Reducible Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph." (see Section 8-3-~~261263~~264, Volatile Organic Compound).

605.11 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure for a basement specialty coating shall be determined by ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry." (See section 8-3-206, Basement Specialty Coating.)

605.12 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed

by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings."

605.13 Tub and Tile Refinish Coating Adhesion: The adhesion of a tub and tile refinish coating shall be determined by ASTM D 4585-99 "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test." (See Section 8-3-~~259~~260, Tub and Tile Refinishing Coating.)

605.14 Tub and Tile Refinish Coating Hardness: The hardness of a tub and tile refinish coating shall be determined by ASTM D3363-05, "Standard Test Method for Film Hardness by Pencil Test." (See Section 8-3-~~259~~260, Tub and Tile Refinishing Coating.)

605.15 Tub and Tile Refinish Coating Abrasion Resistance: The abrasion resistance of a tub and tile refinishing coating shall be determined by ASTM D 4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser." (See Section 8-3-~~259~~260, Tub and Tile Refinishing Coating.)

605.16 Tub and Tile Refinish Coating Water Resistance: The water resistance of a tub and tile refinish coating shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method for Evaluating Degree of Blistering of Paint." (See Section 8-3-~~259~~260, Tub and Tile Refinish Coating.)

605.17 Waterproofing Membrane: The water resistance of a waterproofing membrane shall be determined by ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course." (See Section 8-3-~~265~~266, Waterproofing Membrane.)

605.18 Mold and Mildew Growth Resistance for Basement Specialty Coatings: The mildew growth resistance of a basement specialty coating shall be determined by ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation." (See Section 8-3-206, Basement Specialty Coating.)

605.19 Reactive Penetrating Sealer Water Repellency: The water repellency of a reactive penetrating sealer shall be determined by ASTM C67-07, "Standard Test Method for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Method for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140-06, "Standard Test Method for Sampling and Testing Concrete Masonry Units and Related Units." (See Section 8-3-~~242~~243, Reactive Penetrating Sealer.)

605.20 Reactive Penetrating Sealer Water Vapor Transmission: The water vapor transmission of a reactive penetrating sealer shall be determined by ASTM E96/E96M-05, Standard Test Method for Water Vapor Transmission of Materials." (See Section 8-3-~~242~~243, Reactive Penetrating Sealer.)

605.21 Reactive Penetrating Sealer – Chloride Screening Applications: The performance criteria of reactive penetrating sealers shall be determined by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures." (See Section 8-3-~~242~~243, Reactive Penetrating Sealer.)

605.22 Stone Consolidants: The specification criteria of a stone Consolidant shall be determined by ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants." (See Section 8-3-~~255~~256, Stone Consolidant.)

(Adopted November 21, 2001)

8-3-606 **Alternative Test Methods**: As an alternative to Sections 8-3-601 and 602, the following test methods may be used:

606.1 U.S. EPA Method 24, incorporated by reference as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coating." or

606.2 SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," incorporated by reference. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993),

606.3 An alternative method provided the method has been reviewed and approved in writing by the APCO, ARB, and the US EPA; or

606.4 Formulation data or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, record keeping) may be used to determine the VOC content of a coating.

Any inconsistencies between the results of tests and any other means for determining VOC content shall be governed by the District Manual of Procedure or the US EPA Method 24.

8-3-607 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in Section 8-3-301, the VOC content of a coating shall be determined as prescribed in Section 8-3-608 for low solids coatings or Section 8-3-609 for all other architectural coatings, with exempt compounds defined by Section 8-3-218. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.

8-3-608: Calculation of the Grams of VOC per liter for Low Solids Coatings: Calculate the VOC content by using the following equation:

$$VOC = \frac{W_s - W_w - W_{es}}{V_m}$$

Where:

W_s = Weight of volatile compounds in grams.
W_w = Weight of water in grams.
W_{es} = Weight of exempt compounds in grams.
V_m = Volume of material in liters.

8-3-609: Calculation of the Grams of VOC per liter for All Other Architectural Coatings: Calculate the VOC content by using the following equation:

$$VOC = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

W_s = Weight of volatile compounds in grams.
W_w = Weight of water in grams.
W_{es} = Weight of exempt compounds in grams.
V_m = Volume of material in liters.
V_w = Volume of water in liters.
V_{es} = Volume of exempt compounds in liters.

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, California 94109

Staff Report

BAAQMD Regulation 8, Rule 3: Architectural Coatings

June 2009

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STAFF REPORT
Regulation 8, Rule 3: Architectural Coatings

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY 4

II. BACKGROUND 4

A. Architectural Coatings 4

B. Regulatory History 8

III. TECHNICAL REVIEW 11

A. 2007 SCM Development 11

B. Emissions Inventory 11

IV. PROPOSED AMENDMENTS 12

A. VOC Limits 12

B. Changes in the Definitions and Coating Categories 14

VI. EMISSIONS AND EMISSIONS REDUCTIONS 16

V. ECONOMIC IMPACTS 17

A. Costs 18

B. Cost Effectiveness 18

C. Incremental Cost Effectiveness 18

D. Socioeconomic Impacts 19

E. District Impacts 20

VI. REGULATORY IMPACTS 20

VII. ENVIRONMENTAL IMPACTS 23

A. CEQA 23

B. Greenhouse Gas Emissions 23

VIII. RULE DEVELOPMENT / PUBLIC CONSULTATION PROCESS 24

IX. CONCLUSION 27

X. REFERENCES 29

I. EXECUTIVE SUMMARY

The Bay Area Air Quality Management District (District or BAAQMD) regulates emissions of volatile organic compounds (VOC) from architectural coatings through limits contained in Regulation 8: Organic Compounds, Rule 3: Architectural Coatings (Rule 8-3). VOCs are one of the primary components of ozone, or photochemical smog. The District is not in attainment of the state one-hour or eight-hour or the federal eight-hour ozone standards. Rule 8-3, which was adopted on March 1, 1978, sets limits on the amount of VOCs that are allowed in various types of coatings used on architectural structures, such as buildings, signs, bridges, and roadways, in the Bay Area. Architectural coatings in the Bay Area emit approximately 16.9 tons per day (tpd) of VOC emissions.

This proposal would further limit the amount of VOCs that would be allowed in architectural coatings. The proposed VOC limits are based on the emission standards recommended by the Final Approved Suggested Control Measure for Architectural Coatings (SCM) developed by the California Air Resources Board (ARB) in 2007. The SCM was developed as a guideline to be used by California air districts in amending their architectural coatings rules. These guidelines promote regulatory uniformity within the California coatings market. Most districts in populated areas typically follow the SCM. The San Joaquin and Sacramento districts are expected to adopt limits reflecting the SCM and the South Coast has adopted similar limits.

The proposed amendments would result in a VOC emission reduction of 5.4 tpd, or about a 32 percent reduction, and cost about $4.42 million per year in the Bay Area. This translates to an average cost increase of $1.21 per gallon of coating. The resulting cost effectiveness is $2,243 per ton of VOC reduced. A socioeconomic impact analysis found no significant impacts on Bay Area jobs or the economy. An environmental impact analysis found no adverse environmental impacts and a CEQA Negative Declaration is proposed.

II. BACKGROUND

A. Architectural Coatings

Architectural coatings include house paints, stains, primers, roof coatings, waterproofing sealers, and industrial maintenance coatings. Architectural coatings are used for aesthetics, for protection, and for labeling on stationary structures such as buildings, fences, and roadways. When these coatings are applied, VOCs are emitted. Solvents that are used for thinning and cleaning are also sources of VOCs.

Although many architectural coatings are waterborne products, they may contain additives that contribute to a small VOC content. These additives include resins, coalescing aids, polymer plasticizers, freeze-thaw stabilizers, and anti-foam agents. These additives are included to create homogeneous films, improve block and print

resistance, prevent coagulation, ease application, and reduce defects formed during application. Other VOC additives include preservatives, thickeners and colorants. Freeze-thaw stabilizers and resin-coalescing aids are major contributors to the VOC content and include ethylene glycol or propylene glycol which prevent the paint from coagulating or solidifying under freezing temperatures and provide more "open time" for proper setting and drying.

Over 40 categories of coatings are regulated under Rule 8-3. The five largest coating categories in terms of emissions are:

1. Flat Coatings
2. Nonflat Coatings
3. Primers, Sealers and Undercoaters
4. Rust Preventative Coatings
5. Wood Coatings.

These five categories account for over 75 percent of the emissions from architectural coatings in the Bay Area.

Detailed lists of each of the coating categories are in Section IV: Proposed Amendments. Below are descriptions of the five largest VOC-emitting coating categories.

1. Flat Coatings

Flat coatings are generally used in low traffic areas and for decorative purposes. Made with a large amount of pigment, they hide the underlying surface well. Flat coatings leave a matte finish, without gloss or shine, and consequently, deemphasize surface irregularities and imperfections. Flat coatings are widely used on both residential and commercial buildings to paint interior and exterior surfaces. Flat coatings are typically used to paint interior surfaces such as ceilings and walls in living and dining rooms, bedrooms and hallways. Flat coatings are also used to paint exterior substrates such as brick; concrete block; wood, vinyl, and aluminum siding; and stucco. Flats are not generally used in bathrooms or kitchens because they generally have less moisture resistance than gloss coatings.

Most flat coatings are formulated to be waterborne products that allow application equipment to be cleaned using soap and water. Flat coatings can be brushed, rolled, or sprayed onto surfaces, such as walls and ceilings. Application typically requires surfaces that are cured, firm, dry, and free of dust, dirt, oil, grease, wax, chalk, mildew or anything that could contaminate or affect the performance of the coating.

Some flat coatings are marketed as "zero VOC" with "low odor" and "quick return to service" qualities. Because of these features, the coatings are recommended for use in buildings that need to be occupied soon after painting.

In developing the SCM, ARB conducted a survey of manufacturers of architectural coatings sold in California. The survey reported 15 solvent-based flat coatings (0.01

percent of flat coatings by volume) that contributed two percent of the VOC emissions from flat coatings. Flat coatings, with over 2770 products, contributed about 15 percent of the total VOC emissions from architectural coatings (2.71 tpd).

2. Nonflat Coatings

The nonflat coatings category includes both nonflat and nonflat – high gloss coatings. Nonflat coatings are typically used in high traffic areas that require frequent cleaning or where moisture is present. Typical residential use includes family rooms, children's rooms, kitchens, bathrooms, high traffic hallways and laundry rooms. Typical use in commercial buildings and institutional facilities includes walls, corridors and stairwells. Nonflat – high gloss coatings have a gloss rating of 70 or more and require more resin to create a glossy appearance, and, consequently, more coalescing solvent to dissolve and suspend the resin. Nonflat – high gloss coatings have a higher VOC limit than other nonflats.

Nonflat coatings are used (with proper preparation and priming) on both interior and exterior surfaces such as drywall, plaster, concrete block, wood and metal. These coatings work best on smooth surfaces.

The most common resins used are vinyl-acrylic or acrylic latexes. Additives containing VOCs include resin coalescing aids, polymer plasticizers, freeze/thaw stabilizers and anti-foam agents. Additives help to create homogeneous films, improve block and print resistance, prevent coagulation, ease application, and reduce defect formation during application. Other VOC-containing additives include thickeners and colorants.

The vast majority of nonflat coatings, over 99 percent, are formulated as waterborne coatings. Nonflat coatings emit 3.72 tpd VOC. Nonflat – high gloss coatings account for less than 1.6 percent of the total volume of architectural coatings and emit 1.07 tpd VOC.

3. Primer, Sealers and Undercoaters

The primers, sealers, and undercoaters category is a generic term that describes the initial coat that provides a suitable substrate for subsequent coatings. It also describes clear sealer coatings that do not require a topcoat. Primers, sealers, and undercoaters are used by homeowners and professionals and are typically sprayed, rolled, or brushed on to the substrate.

Primers, sealers, and undercoaters are used both indoors and outdoors on a wide variety of substrates. The products in this category vary widely in their purpose, from preparing walls for application of vinyl wallpaper to filling porous concrete masonry units. Substrates include drywall, previously painted porous surfaces, masonry, concrete, concrete block, brick, stone, wood, plywood, plaster, polyurethane, aluminum or galvanized siding, vinyl, composition board, ferrous metal, hardboard siding, fiberglass, plastics, spray applied polyurethane foam, organic polymers, foil/mylar, acoustic ceiling tiles, popcorn ceilings, flakeboard, acrylic based mortar systems, wallpaper, asbestos

siding, polyvinyl chloride (PVC), copper, oriented strand board, and bituminous surfaces. Because most products are topcoated, primers, sealers, and undercoats are not exposed to substances in the environment, but must tolerate the environment of the substrate to which they are applied and the environment of the coating that serves as a topcoat. The product data sheets of many primers, sealers, and undercoaters specify a time frame within which they must be topcoated. If not topcoated within the specified time frame, additional surface preparation and/or recoating prior to topcoating may be necessary. As the substrates and topcoats used with primers, sealers, and undercoaters vary widely, so does the range of conditions to which they must be resistant. Primer, sealers, and undercoaters may need to be resistant to, and perform well, under conditions that are alkaline, acidic, etc.

In general, the lower-VOC primers, sealers, and undercoaters typically employ the use of acrylic, acrylic copolymer, or vinyl acrylic copolymer resins, while the higher VOC coatings are formulated with alkyd, urethane, and polyurethane resins. Comparison between the ARB surveys conducted in 2001 and 2005 indicates an increasing reliance on low-VOC primers, sealers, and undercoaters.

A small number of the reported primers, sealers, and undercoaters products require no topcoat. These coatings may be used to prevent toxic outgassing of the substrate, or to provide moisture, dust, and mar resistance.

As with flat and non-flat coating, the vast majority of primers, sealers, and undercoaters are formulated as waterborne coatings, with 98 percent being waterborne. This category accounts for 1.42 tpd of VOC emissions in the Bay Area.

4. Rust Preventative Coatings

Rust preventative coatings are used to provide corrosion protection for metal substrates such as wrought iron and exposed pipes. This category excludes coatings that are recommended for any nonmetallic substrate. Rust preventative coatings are applied directly to interior and exterior metal, or over previously coated surfaces that exhibit corrosion. The finish can range from flat to glossy and the coatings can be applied with a brush, roller, or spray gun. Rust preventative coatings are used by homeowners, contractors, maintenance personnel, and professional painters.

This category was originally intended for those who are not professional paint contractors, such as homeowners and maintenance personnel. The intent was to provide an effective, single component product that would prevent corrosion of metal substrates for residential and commercial uses, not heavy industrial uses such as bridge and structural steel painting. However, after implementation of the 2000 SCM, ARB staff found that products from other categories were shifted to the rust preventative category which still allowed for the use of higher VOC solventborne alkyd technology. After the industrial maintenance 250 g/l limit became effective in 2004, many industrial maintenance products were re-labeled as rust preventative coatings. Based on ARB's survey, rust preventative coatings are primarily solventborne coatings that would not meet the lower industrial maintenance VOC limit. Coatings sold under this category also include

primers, sealers and undercoaters that were shifted from other categories with lower VOC limits.

Some products in this category contain a corrosion inhibitor. Corrosion inhibitors are additives that alleviate or retard the electrochemical oxidation of metals by forming an electrically insulating and/or chemically impermeable coating on exposed metal surfaces to suppress electrochemical reactions. Common materials used for this purpose are chromates, phosphates, and a wide range of specially-designed chemicals that resemble surfactants. Some inhibitors are added to waterborne rust preventative coatings to prevent corrosion that occurs during the drying process.

Traditional coatings in this category use alkyd resins for their good performance combined with ease of application. Most of these are solventborne and have VOC contents above 300 g/l.

Currently, 96 percent of rust preventative coatings are solventborne. This coating category is estimated to emit 1.23 tpd VOC.

5. Wood Coatings

As the name implies, wood coatings are formulated for application to wood, bamboo, cork and wood products, such as plywood, particle board wood composite, and hardboard. Wood coatings can be used both indoor and outdoors. Wood coatings are used for decorative purposes and to provide some protection from abrasion, staining, moisture, dirt, and common chemicals. Wood coatings cover a wide range of applications and functions. Clear wood coatings include lacquers, sanding sealers, penetrating oils, varnishes, stain controllers/wood conditioners, clear stains, and waterproofing sealers. Most opaque wood coatings are lacquers and lacquer undercoaters, but opaque sanding sealers and opaque conversion varnishes are also available.

The wood coatings category includes clear and semitransparent lacquers, varnishes, sanding sealers; penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. The wood coatings category also includes opaque wood coatings such as opaque lacquers, sanding sealers, and lacquer undercoaters. The wood coatings category does not include clear sealers that are labeled and formulated for use on concrete/masonry surfaces, or coatings intended for substrates other than wood.

Seventy three percent of wood coatings sold are solventborne, and this coating category is responsible for 1.26 tpd of VOC emissions.

B. Regulatory History

Regulation 8, Rule 3, Architectural Coatings, limits the amount of volatile organic compounds (VOC) used to formulate paints and coatings used on architectural structures. Coatings with a VOC concentration in excess of the limits of the rule may not be sold or used in the Bay Area.

The District Board of Directors adopted Regulation 8, Rule 3 on March 1, 1978. The rule has been amended numerous times since its adoption as shown in the table below, initially to allow sufficient time for coatings manufacturers to meet VOC limits, and subsequently to add and refine categories and reduce allowable VOC content.

Table 1
Regulation 8, Rule 3 History

Date	Action
March 1, 1978	Initial adoption
May 20, 1981	Small business exemption and compliance dates extended
September 1, 1982	Compliance dates extended and temporary exemptions added
December 1, 1982	Compliance dates extended
March 17, 1983	Administrative and test method requirements added
May 18, 1983	New coating categories and VOC limits added; compliance dates adjusted
January 8, 1986	New coating categories and VOC limits added; compliance dates adjusted
January 17, 1990	Amended to incorporate 1989 ARB Suggested Control Measure; amendments later voided by court decision
November 21, 2001	Adoption of current rule incorporating 2000 ARB Suggested Control Measure

The Board adopted the current rule on November 21, 2001, to incorporate ARB's 2000 Architectural Coatings SCM. The amendments contained new and modified definitions, VOC limits, container labeling requirements, reporting provisions, and references to test methods for compliance determinations. The Board also adopted a new chapter to the Manual of Procedures (MOP), Volume I, Number 7: Emissions Averaging Procedure for Architectural Coatings, which was also derived from the SCM. This procedure was intended to provide a temporary compliance option to meet the state-derived limits; it has since expired. Table 2 below provides a summary of the current VOC limits in Rule 8-3.

Table 2
Rule 8-3 Current VOC Limits for Architectural Coatings

Coating Category	Limit (g/l)
Flat Coatings	100
Nonflat Coatings	150
Nonflat – High Gloss Coatings	250
Specialty Coatings:	
Antenna Coatings	530
Antifouling Coatings	400
Bituminous Roof Coatings	300

Coating Category	Limit (g/l)
Bituminous Roof Primers	350
Bond Breakers	350
Clear Wood Coatings:	
Clear Brushing Lacquer	680
Lacquer (including lacquer sanding sealer)	550
Sanding sealer	350
Varnish	350
Concrete Curing Compounds	350
Dry Fog Coatings	400
Faux Finishing Coatings	350
Fire Resistive Coatings	450
Fire Retardant Coatings:	
Clear	650
Opaque	350
Floor Coatings	250
Flow Coatings	420
Form-Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low Solids Coatings	120
Magnesite Cement Coatings	450
Mastic Texture Coatings	300
Metallic Pigmented Coatings	500
Multi-Color Coatings	250
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Quick-Dry Enamels	250
Quick-Dry Primers, Sealers, Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventative Coatings	400
Shellacs:	
Clear	730
Opaque	550
Specialty Primers, Sealers and Undercoaters	350
Stains	250
Swimming Pool Coatings	340
Swimming Pool Repair and Maintenance Coatings	340
Temperature-Indicator Safety Coatings	550
Traffic Marking Coatings	150
Waterproofing Concrete/Masonry Sealers	400
Waterproofing Sealers	250
Wood Preservatives	350

In practice, some coatings may be used for more than one purpose. To address this, the rule requires that the most restrictive VOC limit applicable to any use listed for the product (on labeling, stickers, sales advertising and technical literature) applies to all uses of the product. However, the rule makes an exception for 15 coating products, which include bituminous roof coatings, flow coatings, pretreatment wash primers, shellacs, and wood preservatives.

The rule requires specific information to be provided with all coatings: date of manufacture or date code; thinning recommendation, if applicable; and the VOC content.

The rule also requires manufacturers of coatings to report to ARB the amount sold or distributed for certain types of coatings, including clear brush lacquers, rust preventative coatings, specialty primers, recycled coatings, and bituminous coatings. Further, manufacturers also must report on the amounts of toxic compounds used in coatings such as methylene chloride or perchloroethylene. These reports must be submitted by each manufacturer at least once a year.

III. TECHNICAL REVIEW

A. 2007 SCM Development

Staff members of ARB, in conjunction with staff members of California air districts and CAPCOA, developed an updated SCM for architectural coatings along with a technical support document that provides the technical basis for the SCM. The SCM is ARB's model rule for architectural coatings and is not a formal regulation. CARB approved an SCM for architectural coatings in 1977 and, as technology advanced, amended it in 1985, 1989, 2000, and 2007. While CARB provides support to the District by developing the SCM, the District is responsible for adopting, implementing, and enforcing architectural coating rules in the Bay Area. The 2007 SCM development was based on:

- ARB's 2005 Architectural Coatings Survey / Reactivity Analysis;
- Meetings with district and EPA representatives
- Public workshops;
- Meetings with industry trade groups and individual manufacturers;
- Meetings with essential public services agencies;
- Evaluation of the South Coast AQMD Rule 1113 and the EPA National Architectural Coatings Rule;
- Technology assessments of coating categories;
- Evaluation of durability and performance research for several coating categories;
- Preparation of an environmental impact analysis; and
- An economic impacts survey and preparation of an economic analysis.

The SCM recommends lower VOC limits and modified definitions for many coating categories no later than 2010 for most coating categories (2012 for two categories).

B. Emissions Inventory

The emissions inventory for architectural coatings is based on ARB's 2005 Architectural Coating Survey, Final Report. Statewide (excluding the South Coast Air Quality Management District and architectural coatings sold in containers less than a quart) ARB reported emissions to be about 47.4 tpd. VOC emissions from architectural coatings in the Bay Area, as derived from the statewide inventory, are estimated to be approximately 16.9 tpd.

IV. PROPOSED AMENDMENTS

The District is proposing the adoption of the VOC limits recommended by ARB in the 2007 Architectural Coatings SCM.

A. VOC Limits

The VOC limits recommended by the 2007 Architectural Coatings SCM were developed by ARB staff following a detailed assessment of each of the coating categories. Manufacturers of architectural coatings would comply with the proposed limits by reformulating their products to replace some of the VOCs with water or exempt compounds or increasing the amount of resin and pigmented solids contained in the coatings. However, many coating products already comply with the VOC limits and no reformulation is necessary.

The proposed VOC limits are provided in Table 3. The proposed amendments would set VOC limits for more than 40 coating categories. Categories listed in boldface indicate VOC limits that are more stringent than the VOC limits currently contained in Rule 8-3, or categories that were either combined or eliminated.

Table 3
Proposed VOC Limits for Architectural Coatings

Proposed Coating Category: (Coatings listed in **bold face** have a proposed change in VOC limits.)	**Proposed VOC Limits (g/l)**	
	Effective Dates	
	1/1/2011	**1/1/2012**
Flat Coatings	**50**	
Nonflat Coatings	**100**	
Nonflat – High Gloss Coatings	**150**	
SPECIALTY COATINGS		
Aluminum Roof	**400**	
Basement Specialty Coatings	**400**	
Bituminous Roof Coatings	**50**	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealer	**50**	
Dry Fog Coatings	**150**	
Faux Finishing Coatings	350	
Fire Restive Coatings	350	
Floor Coatings	**100**	
Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	**100**	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	**100**	
Reactive Penetrating Sealer	350	
Recycled Coatings	250	
Roof Coatings	**50**	
Rust Preventative Coatings		**250**
Shellacs: Clear Opaque	 730 550	
Specialty Primers, Sealers and Undercoaters (Specialty PSU)		**100**
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	**100**	
Tub and Tile Refinish	**420**	
Waterproofing Membranes	250	
Wood Coatings	**275**	
Wood Preservatives	350	
Zinc-Rich Primer	**340**	

B. Changes in the Definitions and Coating Categories

ARB added, made changes to, or eliminated architectural coating categories based on information provided in the 2001 and 2005 surveys. Table 4 lists the categories and definitions that are proposed to be added to the rule for new product categories identified in the surveys.

Table 4
Proposed New Architectural Coating Categories and Definitions

Added Category	Definition
Aluminum Roof	A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon).
Basement Specialty Coating	A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces.
Concrete/Masonry Sealer	A clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions: 1) prevent penetration of water; or 2) provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light; or 3) harden or dustproof the surface of aged or cured concrete
Driveway Sealer	A coating labeled and formulated for application to worn asphalt driveway surfaces to fill cracks or seal the surface to provide protection; or restore or preserve the appearance.
Reactive Penetrating Sealer	A clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally-occurring minerals in the substrate. Reactive Penetrating Sealers line the pores of concrete and masonry substrate with a hydrophobic coating, but do not form a surface film.
Stone Consolidants	A coating that is labeled and formulated for application to stone substrates to repair historic structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants must penetrate into stone substrates to create bonds between particles and consolidate deteriorated material.
Tub and Tile Refinish	A clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop.
Waterproofing Membrane	A coating that is labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate. Waterproofing Membranes are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials.

Added Category	Definition
Wood Coatings	Coatings labeled and formulated for application to wood substrates only. The Wood Coatings category includes the following: clear and semitransparent lacquers, varnishes, sanding sealers, penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. The Wood Coatings category also includes the following opaque wood coatings: opaque lacquers, opaque sanding sealers, and opaque lacquer undercoaters. The Wood Coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces, or coatings intended for substrates other than wood.
Zinc-Rich Primer	A coating that meets all of the following specifications: coating contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids and is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings

Some of the existing definitions and categories are proposed to be deleted because the categories were either replaced by new categories or were unnecessary because the coatings were no longer sold in California. Table 5 provides a listing of the categories that are proposed to be eliminated and the reason for each elimination.

Table 5
Architectural Coating Categories Proposed to Be Eliminated

Deleted Category	Rationale for Removal
Antenna	No products were reported in the 2005 survey. Coatings used for antennas can be addressed under other categories (e.g., Industrial Maintenance, Rust Preventative).
Antifouling	No products were reported in the 2001 survey nor the 2005 survey. Antifouling coatings are primarily addressed by marine coating rules.
Fire-Retardant – Clear Fire-Retardant – Opaque	The Fire Retardant categories are no longer needed. Products with fire retardant properties can comply with VOC limits in the Flat, Nonflat, and other applicable categories. Therefore, separate categories to accommodate higher-VOC fire retardant coatings are not necessary.
Flow	No products were reported in the 2005 survey. Flow coatings can be addressed by other categories (e.g., Industrial Maintenance).
Quick Dry Enamel	This category is no longer needed as these products fall under the Nonflat – High Gloss category. During development of the 2000 SCM, ARB staff indicated that this category would be eliminated.
Quick Dry Primer, Sealer, Undercoater	This category is no longer needed as these products fall under the Primer, Sealer and Undercoater (PSU) and Specialty PSU categories. During development of the 2000 SCM, ARB staff indicated that this category would be eliminated.
Swimming Pool Repair and Maintenance Coatings	This category will be covered under the revised definition of Swimming Pool Coatings. During development of the 2000 SCM, ARB staff indicated that this category would be eliminated.
Temperature Indicator Safety	No products were reported in the 2001 survey nor the 2005 survey. Coatings used for temperature indicatory safety can be addressed by other categories (e.g., Industrial Maintenance, High Temperature).

Deleted Category	Rationale for Removal
Waterproofing Concrete/ Masonry Sealers	Most of the products that were formerly classified as Waterproofing Concrete/Masonry Sealers will be addressed by the new Concrete/ Masonry Sealer category. In addition, some products can be reclassified as Basement Specialty Coatings, Industrial Maintenance, Reactive Penetrating Sealer, Stone Consolidants, Wood Coatings, or Waterproofing Membranes.
Waterproofing Sealers	Most of the products that were formerly classified as Waterproofing Sealers will be addressed by the new Concrete / Masonry Sealer category. In addition, some products will be reclassified as Basement Specialty Coatings, Industrial Maintenance, Reactive Penetrating Sealer, Stone Consolidants, Wood Coatings, or Waterproofing Membranes.

VI. EMISSIONS AND EMISSIONS REDUCTIONS

The proposed amendments would result in a VOC emission reduction of 5.4 tpd, or about 32 percent of the 16.9 tpd inventory for this source category. Table 6 presents the annual VOC emissions, emissions reduction and VOC limits per coating category. Although there are emissions reductions from 19 coating categories with changes in the VOC limits, 95 percent of the emissions reductions are attributable to eight categories, which account for over 80 percent of the total emissions. These eight categories are highlighted in **boldface** type.

Table 6
VOC Emission Reductions by Product Category

Coating Category	Current VOC Limit (g/l)	Proposed VOC Limit (g/l)	Current VOC Emissions (tpd)	Emission Reductions (tpd)
Flat Coatings	**100**	**50**	**2.71**	**1.11**
Nonflat Coatings	**150**	**100**	**3.72**	**0.99**
Nonflat - High GlossCoatings	**250**	**150**	**1.07**	**0.32**
SPECIALTY COATINGS				
Aluminum Roof	500	400	0.39	0.07
Basement Specialty Coatings	400	400	0.00	0.00
Bituminous Roof Coatings	300	50	0.08	0.06
Bituminous Roof Primers	350	350	0.05	0.00
Bond Breakers	350	350	0.03	0.00
Concrete Curing Compounds	350	350	0.09	0.00
Concrete / Masonry Sealer	**250-400**	**100**	**0.40**	**0.19**
Driveway Sealer	100	50	0.01	0.00
Dry Fog Coatings	400	150	0.16	0.11
Faux Finishing Coatings	350	350	0.04	0.00
Fire Restive Coatings	350	350	0.00	0.00
Floor Coatings	250	100	0.14	0.02
Form-Release Compounds	250	250	0.16	0.00

Coating Category	Current VOC Limit (g/l)	Proposed VOC Limit (g/l)	Current VOC Emissions (tpd)	Emission Reductions (tpd)
Graphic Arts Coatings (Sign Paints)	500	500	0.00	0.00
High Temperature Coatings	420	420	0.01	0.00
Industrial Maintenance Coatings	250	250	0.84	0.00
Low Solids Coatings	120	120	0.01	0.00
Magnesite Cement Coatings	450	450	0.02	0.00
Mastic Texture Coatings	300	100	0.10	0.00
Metallic Pigmented Coatings	500	500	0.02	0.00
Multi-Color Coatings	250	250	0.00	0.00
Pre-Treatment Wash Primers	420	420	0.00	0.00
Primers, Sealers, and Undercoaters	**200**	**100**	**1.42**	**0.40**
Reactive Penetrating Sealer	350	350	0.00	0.00
Recycled Coatings	250	250	0.00	0.00
Roof Coatings	250	50	0.08	0.02
Rust Preventative Coatings	**420**	**250**	**1.23**	**0.56**
Shellacs:				
Clear	730	730	0.05	0.00
Opaque	550	550	0.16	0.00
Specialty Primers, Sealers and Undercoaters (PSU)	**350**	**100**	**1.21**	**0.94**
Stains	250	250	0.76	0.00
Stone Consolidant	250	450	0.00	0.00
Swimming Pool Coatings	340	340	0.01	0.00
Traffic Marking Coatings	150	100	0.33	0.03
Tub and Tile Refinish	250	420	0.00	0.00
Waterproofing Membranes	250	250	0.23	0.03
Wood Coatings	**350-650**	**275**	**1.26**	**0.50**
Wood Preservatives	350	350	0.11	0.00
Zinc-Rich Primer	500	340	0.01	0.00
		TOTAL	**16.9**	**5.4**

V. ECONOMIC IMPACTS

ARB, in developing the 2007 SCM, found no serious adverse economic impacts and no significant impacts on employment. There were no significant adverse impacts on the profitability of businesses affected by the rule. Profitability was estimated by determining the potential decline in the return on owner's equity (ROE) from costs imposed by compliance with the rule. If coating manufacturers were to absorb all costs associated with the proposed amendments (i.e., not pass any costs on to consumers), the proposal would result in an average ROE decline of 2.1 percent, which is not considered to be a significant impact on the profitability of an affected business. It is expected that most coatings manufacturers would elect to pass on the additional cost to their customers.

A. Costs

1. Total Costs of the Proposal

ARB estimated nonrecurring costs such as R&D, testing, and equipment purchases. These costs were annualized and added to annual recurring costs that include increases or decreases in raw material costs, labeling, packaging and reporting. They found a statewide total of $12.3 million in costs to implement the SCM proposal. The proposed amendments are estimated to cost approximately $4.42 million per year in the Bay Area. This cost value includes costs to consumers throughout California, as well as manufacturers and distributors within and beyond California. Total annual cost to the nine coating firms affected by Rule 8-3 is estimated to be $300,000.

2. Costs to Consumers

On a per gallon basis, the proposal would reduce the costs of coatings in some categories by more than six dollars per gallon, and increase the costs of coatings in other categories, in certain cases by as much as $27 per gallon.[i] On average, if all costs were passed on to the consumer, ARB found that the average cost of a gallon would increase by about six percent, or $1.21 per gallon.

B. Cost Effectiveness

The District-wide cost of the proposal is estimated to be $4.42 million per year. The estimated emission reduction is 5.4 tpd (1,971 tons per year). This results in a cost effectiveness of $2,243 per ton of VOC reduced.

C. Incremental Cost Effectiveness

The District is required to conduct an incremental cost effectiveness analysis prior to adopting any proposed Best Available Retrofit Control Technology rule or feasible measure pursuant to Health and Safety Code Section 40920.6(a)(3). Under this section, the District must: (1) identify one or more control options achieving the emission reduction objectives for the proposed rule; (2) determine the cost effectiveness for each option; and (3) calculate the incremental cost effectiveness for each option. To determine incremental costs, the District must "calculate the difference in the dollar costs divided by the difference in the emission reduction potentials between each progressively more stringent potential control option as compared to the next less expensive control option."

$$\mathrm{ICE} = \frac{\mathrm{Cost}_{\mathrm{Proposal}} - \mathrm{Cost}_{\mathrm{Alternative}}}{\mathrm{Reductions}_{\mathrm{Proposal}} - \mathrm{Reductions}_{\mathrm{Alternative}}}$$

[i] Floor coatings are the only category with a projected cost increase of more than $17 per gallon. The ARB staff report states that this is because there are a large number of coatings sold in this category in small containers. However, the report notes that 85% of floor coatings sold, by volume, already comply with the proposed VOC limit, and so will incur no increased costs.

The option chosen to be compared with this proposal is reducing the VOC limits only for the five coating categories that achieve the greatest emissions reductions. These coating categories are Flat Coatings; Nonflat Coatings; Specialty Primers, Sealers, and Undercoaters; Rust Preventative Coatings; and Wood Coatings. Table 7 presents the cost difference between current and future compliant coatings, the estimated emission reductions, and the cost effectiveness associated with each of the five coating categories.

Table 7
Summary of Cost and Cost Effectiveness for the Top Five Emitting Coatings

Coating Category	Bay Area Annual Cost Increase ($/year)	Emission Reductions (tpd)	Cost Effective-ness ($/ton)
Flat Coatings	- ($299,418)	1.11	- ($739)
Nonflat Coatings	$2,644,566	0.99	$7,319
Specialty Primers, Sealers, Undercoaters	- ($257,941)	0.94	- ($752)
Rust Preventative Coatings	- ($99,450)	0.56	- ($487)
Wood Coatings	- ($221,956)	0.50	- ($1,216)
	$1,765,801	**4.10**	**$1,180**

Importing the cost and emission reduction values for the proposed amendments, and the option of only reducing VOC limits for five categories from Table 7 into the formula for incremental cost effectiveness yields the following expression:

$$\text{ICE} = \frac{\$4.42 - 1.77 \text{ million/yr}}{(5.4 - 4.1 \text{ tpd})(365 \text{ days/yr})}$$

An incremental cost effectiveness of $5593 per ton of VOC emissions reduced is estimated for achieving emission reductions from coating categories other than the five highest emitting categories. This means that the first 4.1 tons per day of emission reductions come at a cost of $1,180 per ton, while the remaining 1.3 tons per day of emission reductions come at a cost of $5593 per ton, which is nevertheless well within the range of cost effectiveness for measures included in the District's most recent ozone strategy, the Bay Area 2005 Ozone Strategy.

D. 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." Bay Area Economics of Emeryville, California has prepared a socioeconomic analysis of the proposed amendments to Rule 8-3. The analysis concludes that the affected

manufacturers and distributors should be able to pass through the costs of compliance with the proposed rule without significant economic dislocation or loss of jobs. District staff has reviewed and accepted this analysis.

E. District Impacts

The proposed amendments will have very little impact on District resources. Enforcement of this rule is conducted on a periodic basis through surveying coatings sold and used on major projects, through interaction with ARB staff regarding coatings distributed statewide, and through response to complaints from contractors and the general public.

VI. 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. There is only one federal air pollution control regulation that applies to architectural coatings: the National Volatile Organic Compound Emission Standards for Architectural Coatings (National Rule), which was promulgated by the EPA and published in the Federal Register on September 11, 1998. The National Rule applies only to manufacturers and importers of architectural coatings. Rule 8-3 applies to a wider range of entities, including manufacturers, distributors, retailers, and end users of architectural coatings. Further, category by category, the VOC limits contained in this proposal are more stringent than those found in the National Rule as shown in the comparison presented in Table 8.

Table 8
Comparison Between the National Rule and the Proposed Amendments to Rule 8-3

National Rule Coating Category	VOC Limit (g/l)	Reg. 8-3 Coating Category, as per proposed amendments	VOC Limit (g/l)
Antenna Coatings	530	Industrial Maintenance	250
Anti-Fouling Coatings	450	Industrial Maintenance	250
Anti-Graffiti Coatings	600	Industrial Maintenance	250
Bituminous Coatings And Mastics	500	Bituminous Roof Coatings Bituminous Roof Primers Concrete/Masonry Sealers Driveway Sealers Industrial Maintenance Waterproofing Membranes	50 350 100 50 250 250
Bond Breakers	600	Bond breakers	350
Calcimine Recoater	475	Flat Specialty PSU	50 100
Chalkboard Resurfacers	450	Industrial Maintenance	250

National Rule Coating Category	VOC Limit (g/l)	Reg. 8-3 Coating Category, as per proposed amendments	VOC Limit (g/l)
Concrete Curing Compounds	350	Concrete Curing Compounds	350
Concrete Curing and Sealing Compounds	700	Concrete Curing Compounds Concrete/Masonry Sealers	350 100
Concrete Protective Coatings	400	Concrete/Masonry Sealers	100
Concrete Surface Retarders	780	Concrete Curing Compounds	350
Conversion Varnish	725	Wood Coatings	275
Dry Fog Coatings	400	Dry Fog Coatings	150
Extreme High Durability Coatings	800	Industrial Maintenance	250
Faux Finishing/Glazing	700	Faux Finishing Coatings	350
Fire-Retardant/Resistive Coatings:			
Clear	850	Fire Resistive[1]	350
Opaque	450	Fire Resistive[1]	350
Flat Coatings:			
Exterior Coatings	250	Flat	50
Interior Coatings	250	Flat	50
Floor Coatings	400	Floor Coatings	100
Flow Coatings	650	Industrial Maintenance	250
Form Release Compounds	450	Form Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500	Graphic Arts Coatings (Sign Paints)	500
Heat Reactive Coatings	420	Industrial Maintenance	250
High Temperature Coatings	650	High Temperature Coatings	420
Impacted Immersion Coatings	780	Industrial Maintenance	250
Industrial Maintenance Coatings	450	Industrial Maintenance	250
Lacquers (Including Lacquer Sanding Sealers)	680	Wood Coatings	275
Magnesite Cement Coatings	600	Magnesite Cement Coatings	450
Mastic Texture Coatings	300	Mastic Texture Coatings	100
Metallic Pigmented Coatings	500	Metallic Pigmented Coatings Aluminum Roof Zinc-Rich Primers	500 400 340
Multi-Colored Coatings	580	Multi-Colored Coatings	250
Nonferrous Ornamental Metal Lacquers And Surface Protectants	870	Rust Preventative Nonflat – High Gloss Primers, Sealers, Undercoaters	250 150 100
Nonflat Coatings:			
Exterior Coatings	380	Nonflat Coatings	100
Interior Coatings	380	Nonflat Coatings	100
Nuclear Coatings	450	Industrial Maintenance	250
Pretreatment Wash Primers	780	Pretreatment Wash Primers	420
Primers and Undercoaters	350	Primers, Sealers, Undercoaters Specialty PSU	100 100
Quick-Dry Coatings:			
Enamels	450	Non-flat – High Gloss	150
Primers, Sealers, and Undercoaters	450	Primers, Sealers, Undercoaters Specialty PSU	100 100
Repair and Maintenance Thermoplastic Coatings	650	Industrial Maintenance	250
Roof Coatings	250	Roof Coatings	50
Rust Preventative Coatings	400	Rust Preventative Coatings	250
Sanding Sealers (Other than Lacquer	550	Wood Coatings	275

National Rule Coating Category	VOC Limit (g/l)	Reg. 8-3 Coating Category, as per proposed amendments	VOC Limit (g/l)
Sanding Sealers)			
Sealers (Including Interior Clear Wood Sealers)	400	Primers, Sealers, Undercoaters Specialty PSU Wood Coatings Concrete/Masonry Sealers	100 100 275 100
Shellacs:		Shellacs:	
Clear	730	Clear	730
Opaque	550	Opaque	550
Stains:			
Clear and Semitransparent	550	Stains (Semitransparent) Wood Coatings (Clear Stains)	250 275
Opaque	350	Stains	250
Low Solids	120[2]	Low Solids	120
Stain Controllers	720	Wood Coatings	275
Swimming Pool Coatings	600	Swimming Pool Coatings	350
Thermoplastic Rubber Coatings and Mastics	550	Roof Coatings	50
Traffic Marking Coatings	150	Traffic Marking Coatings	100
Varnishes	450	Wood Coatings	275
Waterproofing Sealers and Treatments	600	Concrete/Masonry Sealers Wood Coatings Basement Specialty Coating Driveway Sealers Waterproofing Membrane	100 275 400 50 250
Wood Preservatives:			
Below Ground Wood Preservatives	550	Wood Preservatives	350
Clear and Semitransparent	550	Wood Preservatives	350
Opaque	350	Wood Preservatives	350
Low Solids	120[2]	Wood Preservatives	350
Zone Marking Coatings	450	Traffic Marking Coatings	100

1. In the proposed SCM, the "Fire Resistive" category would be retained for those products that are certified in accordance with ASTM E119-07. However, the "Fire Retardant" category would be eliminated and coatings with fire retardant properties would fall under their primary categories (e.g., Flat, Nonflat, etc.).
2. Units are grams of VOC per liter of coating, including water and exempt compounds, thinned to the maximum thinning recommended by the manufacturer.

The National Rule also contains flexibility provisions that are not in the proposed amendments. These provisions include: (1) an exceedance fee provision; (2) a tonnage exemption; and (3) a recycled coating compliance option. To comply with these provisions, manufacturers and importers must keep specified records and submit annual reports to the appropriate regional US EPA office.

The exceedance fee provision allows manufacturers and importers to comply with the rule by paying a fee, in lieu of meeting the VOC content limits. The tonnage exemption allows manufacturers and importers to sell or distribute limited quantities of architectural coatings that do not comply with the VOC content limits and for which no exceedance fee is paid. The recycled coatings compliance option allows calculation of an adjusted

VOC content for coatings that contain a certain percentage of post-consumer coating. Containers of recycled architectural coatings must include labeling that shows the percentage, by volume, of post-consumer coating content. Staff did not propose to include an exceedance fee or tonnage exemption in the proposed SCM, because of the need to maximize emission reductions in California, and because California architectural coating rules have been successful without these type of exemptions. The National Rule's recycled coating option was not included in the proposed SCM, because ARB staff believes having a Recycled Coatings category with a VOC limit of 250 g/l accomplishes the same goal of encouraging recycling without the need for an adjusted VOC content credit.

VII. 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. The initial study concludes that there are no potential significant adverse environmental impacts associated with the proposed amendments. The initial analysis and a draft negative declaration was posted and available for comment prior to the public hearing. No comments were received.

B. Greenhouse Gas Emissions

In June, 2005, the District's Board of Directors adopted a resolution that recognizes 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 (CO_2) 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 because ozone absorbs infrared radiation. Consequently, reducing VOCs

to make progress towards meeting California air quality standards for ozone will help reduce global warming.

Adoption and implementation of the proposed amendments to Rule 8-3 should not result in any impact on the emissions of greenhouse gases. The method of control in this proposal is the reduction of VOC limits for various architectural and industrial maintenance coatings. These coatings are applied and allowed to dry via evaporation. No abatement equipment is used. Consequently, there would be no additional energy requirements and, therefore, the proposal is neutral in regards to greenhouse gas generation.

VIII. RULE DEVELOPMENT / PUBLIC CONSULTATION PROCESS

The process to bring this proposal to the Board of Directors has been a comprehensive process involving architectural coatings manufacturers, their suppliers and trade associations, and consultation with other regulatory agencies such as ARB, EPA, and other California air districts. In the development of this staff report, the previous workshop report and associated Public Workshops, and proposed amendments District staff has:

- Participated in the development of ARB's 2007 Architectural Coatings SCM;
- Held meetings and conference calls, and met and corresponded via telephone calls, emails and letters with architectural coatings manufacturers, suppliers, trade association representatives, solvent manufacturers, end users, and other interested parties; and
- Consulted with staff members from the ARB, EPA, and other air districts.

Staff developed the economic analysis based on the analysis presented in the 2007 SCM technical support document and by additional costing information provided by coating manufacturers.

Staff also hosted a public workshop to inform and solicit comments from the affected industries and interested public on the proposed amendments to Rule 8-3. The workshop was held at the District office on January 13, 2009. Stakeholders, who included coating industry representatives, and staff members from ARB, attended in person or via conference call.

Staff received comments during and subsequent to the workshops. The following is a summary of the comments received along with District responses:

- Adopt the 2007 Architectural Coatings SCM VOC limits and other provisions as recommended.

  Response: Staff revised the proposal to ensure consistency with the 2007 SCM including definitions and VOC limits, where applicable.

- Delay the effective date of the proposed limits for a year or two.

  Response: Effective dates for compliance were delayed from January 1, 2010 until January 1, 2011 for all but two coating categories (January 1, 2012 for the remaining two, as recommended by the SCM) to provide sufficient time for coating manufacturers to produce compliant coatings and label them as prescribed in the proposal.

- Eliminate the proposed 25 g/l standard for solvents used in surface preparation and cleanup.

  Response: The proposed 25 g/l standard for solvents used in surface preparation and cleanup was removed. The rule already has solvent handling and storage requirements so as to minimize evaporation into the atmosphere. In some coating applications, surface preparation has included wipe cleaning with solvent-laden cloth. However, this is rarely true in the application of architectural coatings as verified by industrial painting contractors who work on the metal substrates where solvent wipe cleaning could be used.

- Add language to address circumvention of the one-quart exemption.

  Response: A request was made to eliminate the exemption for coatings sold in liter containers by Kyle Frakes, representing Tnemec Coatings. Mr. Frakes claims that large quantities of quart (0.9 liter) containers of high-solvent fluoropolymer coating (for metal exteriors) were being sold by Tnemec's competitors. The liter exemption was developed for small jobs, touch up, and to allow certain higher VOC niche products to remain in the marketplace in small applications. Mr. Frakes cited one instance in the Sacramento area where many quarts containers were mixed for application, circumventing the intent of the rule. Staff believes that such instances are rare, in part because multiple quart containers are significantly more expensive to purchase. Under the proposed amendments, manufacturers will be required to submit data on quart containers, so any large scale circumvention could be detected.

- Provide a limited exemption for the construction of the Eastern Span of the Bay Bridge.

  Response: An exemption for foreign-constructed segments of the Bay Bridge retrofit was requested by Andy Rogerson of Caltrans. Mr. Rogerson claims that Caltrans must use solvent-borne inorganic zinc coatings to touch up foreign-applied coatings for compatibility. The solvent-borne inorganic zinc coating has a VOC content of 490 g/l. In contrast the Golden Gate Bridge has used waterborne inorganic zinc coatings for a number of years in both new construction for seismic retrofit projects and for repainting. Staff consulted with Golden Gate Bridge District personnel and believes that Caltrans can comply with the lower limit. Caltrans was consulted; but did not raise this issue during the development of the SCM at the state level.

- Clarify labeling requirements.

Response: Labeling requirements were clarified.

- Clarify some of the definitions.

  Response: Definitions were clarified.

- Include a reactivity-based compliance option.

  Response: Staff does not propose a reactivity-based compliance option at this time. Staff has collaborated closely with staff members from ARB and EPA and other interested parties in an attempt to develop a reactivity option for a limited number of architectural coatings. Different VOCs vary in their capacity to react in the atmosphere to form ozone. Reactivity would account for the ozone-forming ability of each of the volatile organic compounds used in the coating formulations. A manufacturer could comply through a reduction in the overall reactivity of the coating, even if the mass of the VOC in the coating did not meet the traditional mass-based VOC limit (grams VOC per liter of coating or pounds VOC per gallon of coating).

  Staff generally supports the concept of a reactivity-based alternative for coating manufacturers, provided certain criteria are met. These criteria include ensuring comparable ozone benefits with a reactivity-based limit; limiting the use of low-reactive, but potentially toxic compounds; and developing of a verifiable test method to enforce a reactivity-based standard. To date, the only reactivity-based rule adopted for paints and coatings is one adopted by the ARB for aerosol paint products. No district has adopted a reactivity-based rule. Staff believes that more time is necessary to develop consensus on the derivation and form of a reactivity-based standard, on how to address toxicity and other environmental impacts and on what other elements should be incorporated into a rule to make a standard enforceable. Consequently, staff recommends adoption of the proposed amendments to reduce emissions as quickly as possible, and futher the analysis of a potential reactivity-based compliance option.

- Exempt tertiary butyl acetate (TBAC) as a VOC.

  Response: Staff does not propose to exempt TBAC in the definition of VOC for architectural coatings. This request was evaluated during the recent regulatory development of amendments to Regulation 8, Rule 45: Motor Vehicle and Mobile Equipment Coating Operations (Rule 8-45). Staff evaluation of the exemption request concluded that because TBAC may potentially pose a cancer risk to humans, and because compliant coatings that do not contain TBAC are already available on the market, TBAC should not be proposed for exemption in the amendments to Rule 8-45. Additional testimony from staff at the California Office of Environmental Health Hazard Assessment (OEHHA) informed the Board's decision not to exempt this compound.

  No new toxicological data have been made available to District staff since the adoption of the amendments to Rule 8-45 in December 2008. However, Daniel Pourreau, representing LyondellBasell Chemical Company, the manufacturer of

TBAC, referenced a conclusion made by a non-profit group, Toxicology Excellence for Risk Assessment (TERA). TERA concluded that a two-year bioassay on TBAC is unnecessary to reach a conclusion that TBAC is unlikely to be a human carcinogen. Their findings were to have been made available in a report to be released in March 2009. (Note: the report was released on April 15, 2009. Please see Comments and Responses).

In 1991, the District Board of Directors adopted a policy directing staff to consider the impacts of negligibly photochemically reactive compounds on a rule-by-rule basis and to not exempt compounds that deplete stratospheric ozone or are toxic. The Suggested Control Measure developed by ARB does not exempt TBAC, nor do the proposed VOC limits contemplate the use of TBAC to comply. OEHHA, which is the agency best suited to determine and recommend an exemption for newly developed (or newly exempted) compounds, has not recommended an exemption for this compound.

IX. CONCLUSION

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 progress toward meeting federal and state ozone standards, as well as meet transport mitigation requirements;
- Authorized by California Health and Safety Code Section 40702;
- Clear, in that the new regulation specifically delineates the affected industries, compliance options and administrative and monitoring requirements for industry subject to this rule;
- Consistent with other District rules, and not in conflict with state or federal law;
- Non-duplicative of other statutes, rules or regulations; and
- Properly references the applicable District rules and test methods and does not reference other existing law.

A socioeconomic analysis prepared by Bay Area 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 any adverse environmental impacts. District staff have reviewed and accepted this analysis as well. A Negative Declaration for the proposed amendments has been prepared and was circulated for comment, and no comments were received.

Staff recommends the adoption of the proposed amendments to Regulation 8, Rule 3: Architectural Coatings, and approval of a CEQA Negative Declaration.

X. REFERENCES

Final Approved Suggested Control Measure for Architectural Coatings, ARB, February 2008.

Technical Support Document for the Proposed Suggested Control Measure for Architectural Coatings, ARB, September 2007.

2005 Architectural Coatings Survey, Final Report, ARB, December 2007.

Bay Area Census 2000, Metropolitan Transportation Commissions and Association of Bay Area Governments, October 1, 2003. http://www.bayareacensus.ca.gov/

2001 Architectural Coatings Survey, Final Report, ARB, October 2003.

Technical Support Document for the Proposed Amendments to the Suggested Control Measure for Architectural Coatings, ARB, September 2007.

Primer on Greenhouse Gases, Donald J. Wuebbles and Jae Edmonds, 1991.

Kyle Frakes, Tnemec Co. Inc., Letter to Jim Nyrady, ARB, November 18, 2008.

Andy Rogerson, California Department of Transportation, email, March 9, 2009.

Daniel Pourreau, Ph.D., Lyondell, Letter, January 20. 2009.

Appendix A

Written Comments and Responses

WRITTEN COMMENTS AND RESPONSES

Comments were received from the following:

- **Dunn-Edwards Corporation:** Emailed letter, June 10, 2009
- **Prosoco Corporation:** Emailed letter, June 5, 2009
- **American Chemistry Council's Solvent Industry Group:** Emailed letter, June 10, 2009
- **California Air Resources Board (ARB) Staff:** Email letter, June 10, 2009
- **Lyondell Chemical Company:** Emailed letter, June 10, 2009
- **National Paint and Coatings Association (NPCA):** Emailed letter, June 12, 2009

Reactivity

Comment: The District should include a Board resolution (similar to the ARB resolution) committing the District to work toward a future reactivity option. (NPCA, Prosoco)

Response: Staff is committed to continue examining the possibility of including a reactivity-based option in our coating rules. We believe that a reactivity option may be appropriate and feasible, and may lead to greater future reductions in ozone exposure. However, because the District may ultimately submit the rule through ARB to EPA for inclusion in the SIP (state implementation plan) moving forward will require agreement among the agencies about an acceptable structure for a reactivity option. At this point, the agencies have not reached agreement, and considerable work remains to be done.

Comment: Staff should propose the adoption of a reactivity-based program; or, at the very least, adopt one that offers formulators a choice between mass-based and reactivity-based standard. The current mass-based proposal provides formulators with very little flexibility and potentially results in less ozone reductions than would a reactivity-based approach. (Dunn-Edwards, SIG)

Response: While reactivity-based standards may result in greater flexibility for the formulation of architectural coating products, the development of those standards should not hinder adoption and implementation of the SCM mass-based standards that will significantly improve air quality in the Bay Area. During this rule development process, we began evaluating the inclusion of a reactivity option into the proposal. We solicited input from coating and solvent manufacturers, ARB, and US EPA, culminating in the Reactivity Summit hosted by EPA at Research Triangle Park, NC in May, 2009. Through this effort, it became clear that there was little agreement about acceptable structures for reactivity-based standards. Staff will continue to work on the development of a reactivity proposal.

Exempt Tertiary Butyl Acetate (TBAC) as a VOC

Comment: Because TBAC has negligible photochemical reactivity it should be exempted from the VOC definition. (Lyondell, NPCA)

Comment: The District's reluctance to exempt TBAC is based on unofficial speculation by OEHHA staff that it may present a cancer risk to humans. That speculation is based on the 1995 NTP chronic study of its primary metabolite tertiary butyl alcohol (TBA), which caused a slight increase in naturally occurring tumors in male rats and female mice when ingested at high dose

for two years. However, two independent panels of toxicologists, convened by the non-profit organizations NSF International and TERA, have concluded that these tumors are not relevant to human risk assessment and TERA further concluded that a two-year chronic study of TBAC is not necessary to reach this conclusion. So there is a general scientific consensus that neither TBA nor TBAC are potential human carcinogens.

Further, there is credible scientific evidence that TBAC use in architectural coatings cannot result in chronic exposures because it dissipates rapidly from paints and indoor air. Therefore, if TBAC posed a potential chronic hazard to humans, which is does not, no chronic risk would exist from it use in architectural paints. (Lyondell)

Response: The District's reluctance to exempt TBAC is based on studies suggesting that it may be carcinogenic. Other studies suggest that it is not carcinogenic. Contrary to Lyondell's contention, there is no consensus on this point. Staff's view is that the better policy in the face of this uncertainty is to refrain from exempting TBAC. This issue was addressed during the December 3, 2008 Board Hearing on the adoption of proposed amendments to Regulation 8, Rule 45: Automotive Refinishing and Mobile Equipment Coating Operations.

In January 2006, ARB released a report analyzing potential environmental impacts from a VOC exemption for TBAC. The report includes a thorough discussion of the available data on potential health effects from TBAC as well as responses to comments made by Lyondell and others. In part, the report relies on work done by the California Office of Environmental Health Hazard Assessment (OEHHA). According to OEHHA scientists (Budroe, et al. "Acute Toxicity and Cancer Risk Assessment Values for Tert-Butyl Acetate" *Regulatory Toxicology and Pharmacology, Volume 40, Issue 2, November 2004, Pages 168-176)* "TBAC has been demonstrated to be substantially metabolized to TBA in rats, and a positive TBA genotoxicity study suggests that TBA may cause oxidative DNA damage. TBA has been shown to induce tumors in both rats and mice, and OEHHA has calculated an oral cancer potency factor for TBA. Therefore, TBAC should be considered to pose a potential cancer risk to humans because of the metabolic conversion to TBA." ARB staff evaluated the potential use of TBAC in coatings and concluded that TBAC should not be exempted for architectural and aerosol coatings products based on OEHHA's finding that regarding TBA (the metabolite of TBAC) "…that the data are sufficient to conclude that tert-butanol is an animal carcinogen, and may be considered to pose a potential cancer risk to humans." (ARB, "Staff Report for Proposed Amendments to the Suggested Control Measure for Architectural Coatings," November 2007).

Subchronic studies have identified the kidney as a target organ for TBA in both male and female rats. Some scientific review panels have discounted male rat kidney effects based on the conclusion that the effects result from α-2μ-globulin accumulation, a mechanism that some say is not relevant to human health. This is true of the NSF International document cited by Lyondell. However, Doi, et al. (Doi, A. et al. "α2μ-Globulin Nephropathy and Renal Tumors in National Toxicology Program Studies" *Toxicologic Pathology, Volume 35, Pages 533-540*) looked at the role of α-2μ-globulin in male rat kidney tumors and concluded, "These results suggest that while α2μ-globulin nephropathy may contribute to the renal tumor response, the critical component(s) of the nephropathy most closely associated with the development of tumors cannot clearly be identified. Thus, reliance on evidence of α2μ-globulin-associated nephropathy in determining

the potential human hazard from chemicals that cause renal tubular tumor cells in rats may need to be reconsidered." As a result, it is uncertain whether α2μ-globulin nephropathy is the mode of action by which TBA causes tumors in male rats. The NSF document cited by Lyondell recognizes that there is uncertainty, stating that "... based on the chronic studies in rats and mice, 'the data are inadequate for an assessment of human carcinogenic potential....'"

Some reviewers have also questioned studies showing TBA-related mouse thyroid tumors, again because the tumors may not be relevant to human health. However, according to Budroe et al. (2004), "It should be noted that US EPA has adopted the following science policy positions: 1) it is presumed that chemicals that produce rodent thyroid tumors may pose a carcinogenic hazard for human thyroid, and 2) in the absence of chemical-specific data, humans and rodents are presumed to be equally sensitive to thyroid cancer due to thyroid-pituitary disruption." (Hill, et al. 1998)

Lyondell previously sought an exemption for TBAC in connection with the Board's December 2008 adoption of amendments to Regulation 8, Rule 45 (autobody coating). The Board declined to include an exemption in that rule. In its comments on Rule 8-3, Lyondell cites the NSF International document, which dates to 2003 and includes no new information. The TERA document, however, post-dates the Board's action on Rule 8-45 and summarizes a January 2009 meeting convened jointly by US EPA and Lyondell to discuss Lyondell-sponsored toxicity studies. The studies were conducted to support Lyondell's request that EPA exempt TBAC from the US EPA VOC definition. In its comments on Rule 8-3, Lyondell states that the TERA report concludes that the male rat kidney tumors "are not relevant to human risk assessment." However, Lyondell fails to mention that the report also states that TBA alone may not fully explain the tumor effects and that panelists raised concerns that other active metabolites of TBAC might exist, or that TBAC itself might cause the renal effects. In short, Lyondell's comments overstate the extent of agreement regarding tumor effects in rats.

Lyondell also argues that even if TBAC has chronic effects, its use in coatings is not likely to result in chronic exposures. In its comments, Lyondell included data on tests performed at the Research Triangle Park Laboratories on the emissions from use of an enamel and a varnish formulated with TBAC on unprimed gypsum and oak, respectively. It is from these data that the statement that the use of TBAC in architectural coatings cannot result in chronic exposure. However, liver effects have been observed in rats at subchronic exposure levels. These exposure tests also show that the concentrations of TBAC can exceed a recommended acute exposure level (Budroe, et al.(2004)).

The California Health and Safety Code allows each air district the flexibility to decide which compounds from the list of those compounds identified by the US EPA as having negligible photochemical reactivity should be exempted from various District VOC rules. The South Coast AQMD Rule 1113 included a limited exemption for TBAC for industrial maintenance coatings only, which has a VOC limit of 100 g/l in the South Coast. This is because it was believed that the only way to achieve their lower limit was to allow the use of TBAC in the formulation. The VOC limit for the Bay Area for industrial maintenance coatings is 250 g/l, which is currently being achieved without the use of TBAC.

In conclusion, because:

- The available data on of TBAC raise concerns about its health effects;
- The proposed VOC limits in the SCM were developed without reliance on TBAC and the SCM and ARB consumer products rules do not exempt TBAC;
- The staff of OEHHA recommended that we do not exempt TBAC as a VOC[1]; and
- There are readily available alternative methods for manufacturing complying coatings.

Staff does not recommend that TBAC be considered an exempt VOC in these proposed amendments.

Exempt Dimethyl Carbonate and Propylene Carbonate as VOCs

Comment: TBAC, dimethyl carbonate and propylene carbonate should be exempted as VOC. There is a critical and urgent need for safe, effective, and affordable exempt solvents and coating formulators need all available tools to formulate both lower VOC and reactivity coatings. Dimethyl carbonate and propylene carbonate were recently exempted by US EPA and could prove useful for coating formulations. As such, we request the District exempt these compounds as well. (NPCA)

Response: On January 13, 2009, the US EPA delisted dimethyl carbonate and propylene carbonate from the definition of VOCs on the basis that these compounds make a negligible contribution to tropospheric ozone formation. However, although there are no studies suggesting that these compounds may be carcinogenic, there is very limited data on the health effects of acute and chronic exposure to these compounds. It would be premature to exempt these compounds without an adequate review of the available health data on these compounds and possibly without additional health studies. Until a review can be undertaken by OEHHA or a similar agency, staff recommends that we do not exempt these compounds at this time.

Extend Compliance Date for Flats Coatings, Primers, Sealers, and Undercoaters

Comment: The Proposal does not contain an "Averaging Compliance Option" like the one included in South Coast AQMD Rule 1113, which allows manufacturers to distribute limited amounts of product (specifically flat coatings and primers, sealers, and undercoaters) with VOC contents above the applicable limit, so long as the excess VOC content is offset by distribution of product with VOC contents below the limit. To remedy this issue, the District should extend the effective date of the proposed lower limits for flat coatings and primers, sealers, and undercoaters to January 1, 2012. This approach was used in the 2007 SCM to resolve concerns regarding the lower limits proposed for rust preventative coatings and specialty primers, sealers, and undercoaters. (Dunn-Edwards)

Response: Staff disagrees with this comment. The VOC limits being proposed are exactly the same as those contained in the SCM. ARB staff believes the SCM VOC limits are feasible without averaging. In addition, staff has added a year to the 2009 SCM-recommended compliance date.

[1] Testimony provided by John Budroe, Ph.D. of the Office of Environmental Health Hazard Assessment (OEHHA) during the December 3, 2008 Board Hearing on the adoption of proposed amendments to Regulation 8, Rule 45: Automotive Refinishing and Mobile Equipment Coating Operations.

The VOC limits contained in the 2007 SCM were developed in the years leading up to its final approval in consultation with many stakeholders, including paint manufacturers. Staff does not see any reason why manufacturers cannot meet the VOC limits proposed in the timeframe recommended in the SCM and reflected in the proposal.

Medium Density Fiberboard Definition
Comment: It is recommended the following is added definition in §8-3-200:

> Medium Density Fiberboard (MDF): "A composite wood product, panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat."

(ARB, NPCA)

Response: This comment was discussed with ARB staff. Staff agrees with the comment and has added the definition for MDF. This change is non-substantive and provides additional clarity and consistency with the SCM.

Categories to Be Deleted
Comment: Definitions §§8-3-270 through 8-3-285 (for categories to be deleted) include the statement: "Effective January 1, 2011, a coating meeting this definition will be subject to the VOC limit for the applicable category in Section 8-3-301, Table 2, except as provided in Section 8-3-302." The last phrase needs to be changed to: "…except as provided in Sections 8-3-302 and 8-3-303." This necessary to ensure that any coating manufactured before January 1, 2011, and meeting both the definition and limit of a deleted category, will be covered by the Sell-Through Provision of Section 8-3-303. (Dunn-Edwards, NPCA)

Response: Section 8-3-303 applies to all categories of coatings, including those that are proposed to be deleted; therefore, changing the referenced phrase to add a reference to §8-3-303 as suggested would be unnecessary.

Labeling for Industrial Maintenance Coatings
Comment: Section 8-3-401.4 Industrial Maintenance Coatings – it is acceptable for industrial maintenance coatings to be used for residential use (note these were included in the 2000 SCM). For those coatings manufacturers that wish to use up old label stock, the label statement "Not for Residential Use," or "Not Intended for Residential Use" should be allowed. (NPCA)

Response: The old labels that include the statements "Not for Residential Use," or "Not Intended for Residential Use," are acceptable until the compliance date. At that time, the label statement would be limited to "For Industrial Use Only," or "For Professional Use Only."

Labeling for Zinc Rich Primers
Comment: Section 8-3-401.14 – Zinc Rich Primers – consistent with industrial maintenance coatings labeling requirement – NPCA suggests that the label statement "For Industrial Use Only" be allowed as well. (NPCA)

Response: Staff agrees with the comment and has changed the proposal accordingly. This change is non-substantive and provides additional clarity only.

Clarity of a Definition: §8-2-254 – Stain

Comment: For clarification, it is suggested the following modification be made to §8-3-254:

> Stain: "A ~~transparent,~~ semitransparent or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture."

(ARB)

Response: Staff disagrees with the comment. Stains can be both pigmented and transparent, such that the stain colors the wood substrate while allowing the grain pattern or texture to show through.

Clarity of a Definition: §8-3-266 – Wood Coatings

Comment: For clarification, it is recommended that §8-3-266 be modified as follows:

> Section 8-3-266 – Wood Coatings: "Coatings labeled and formulated for application exclusively to wood substrates only. The Wood Coatings category includes the following clear and semitransparent coatings: lacquers, varnishes, sanding sealers, penetrating oils; clear stains; wood conditioners used as undercoats, and wood sealers used as topcoats. The Wood Coatings category also includes the following opaque wood coatings: opaque lacquers, opaque sanding sealers, and opaque lacquer undercoaters. The Wood Coatings category does not include the following: clear sealers that are labeled and formulated for use on concrete/masonry surfaces, or coatings intended for substrates other than wood. Wood Coatings must be labeled 'For Wood Substrates Only,' in accordance with subsection 401.13" (ARB)

Response: Staff agrees with the comment and has changed the proposal accordingly. This change is non-substantive and provides additional clarity only.

Clarity of a Provision: §8-3-306 – Rust Preventative Coatings

Comment: It is recommended that the definition of and provision for §8-3-306 be revised for clarity. (ARB, NPCA)

Response: Staff recognizes that there is a minor issue with the language of §8-3-306 and has proposed corrections so that the section reads as follows:

> Section 8-3-306 – Rust Preventative Coatings: **"**Effective until January 1, 2012, no person shall apply or solicit the application of any rust preventative coating for other than non-industrial use, unless such coating complies with the VOC limit for industrial maintenance coatings as specified in Section 8-3-301."

This change should address this issue, is a non-substantive change, and provides additional clarity.

Clarity of a Provision: §8-3-306 – Faux Finishing Coatings
Comment: It is recommended §8-3-401.10 be modified as follows:

> Section 8-3-401.10 – Faux Finishing Coatings: "Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement: 'This product can only be sold or used as part of a Faux Finishing coating system.'" (ARB)

Response: Staff agrees with the comment and, to ensure clarity, has changed the proposal as follows:

> Section 8-3-401.10 – For Faux Finishing Coatings: "Effective January 1, 2011, the labels of all clear topcoat sold as part of a Faux Finishing Coating system shall ~~be~~ prominently display the statement 'This product can only be sold or used as part of a Faux Finishing coating system.'"

This change is non-substantive and provides additional clarity only.

Typographical Error – §8-3-502.6: Sales Data
Comment: It appears that there is a typographical error in §8-3-502.6: Sales Date. This section references §8-3-607: Calculation of VOC Content, when it should instead reference §8-3-608: Calculation of the Grams of VOC per liter for Low Solids Coatings. (NPCA, Prosoco)

Response: Staff agrees with this comment, and has corrected the typographical error in the final proposal.

Typographical Error – §8-3-227
Comment: There appears to be a typographical error in §8-3-227. The definition references §8-3-607 when it appears that should reference §8-3-608 instead.
(Prosoco)

Response: Staff agrees and has modified the final proposal to correct this error.

Appendix B

Socioeconomic Analysis

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Proposed FINAL Socio-Economic Impact Study: Proposed Amendment to Regulation 8, Rule 3 Architectural Coatings

Submitted to:
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April 2009

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Table of Contents

Executive Summary i

Description of Proposed Rule 1

Regional Trends 4

Regional Demographic Trends 4
Regional Economic Trends 5
Affected Industries 7

Socio-Economic Impacts 9

Methodology 9
Economic Profile of Affected Industries 9
Description of compliance costs 10
Affected Industry Economic Impact analysis 12
Consumer Impacts 12
Affected Industry and Regional Employment Impacts 13
Regional Indirect and Induced Impacts 13

Impact on Small Businesses 14

Executive Summary

The Bay Area Air Quality Management District (BAAQMD) regulates emissions from volatile organic compounds (VOC) associated with architectural coatings through Regulation 8, Rule 3: Architectural Coatings (Rule 8-3). Currently, the BAAQMD is proposing to amend Rule 8-3, to further reduce VOC emissions from several types of architectural coatings to achieve a 5.4 tons per day (tpd), or about 32 percent, emissions reduction from Bay Area regional architectural coatings.

Socio-Economic Impacts

In order to estimate the economic impacts of amending Rule 8-3 on the affected industries, this report compares the industry's annualized compliance costs with its profit ratios. The analysis uses data from the BAAQMD, US Census County Business Patterns, the IRS, and Dun and Bradstreet, a private data vendor.

Economic Profile of Affected Industries

The BAAQMD identifies the affected industries as Coating Manufacturers (SIC 2851). According to BAAQMD records, there are eight coating manufacturers in the region that would be subject to the proposed amendment.

Economic Impacts to Affected Industries

IRS data indicate that firms in the paint, coating, and adhesive manufacturing sector, which includes the affected industry, earn 6.1 percent profits on total revenue, resulting in total industry net profits of $47.7 million. According to BAAQMD and California Air Resources Board (ARB) data, the total annualized compliance costs to affected industry in the Bay Area will be approximately $300,000. Dividing the compliance costs ($300,000) by annual profits ($47.7 million) shows that the proposed Rule would result in a 1.3 percent reduction in firm profits, which is well below well below the ARB's 10 percent threshold used to determine cost burden.

Economic Impacts to Consumers

Although the impacts to the industry are not significant, consumers could potentially bear a significant cost burden. ARB estimates that if manufacturers pass on 100 percent of their costs, it will result in an average increase of $1.21 per gallon of coating sold to consumers. Since the average gallon costs consumers approximately $19.20, this represents a six percent increase in costs. However, since there are currently products on the market already in compliance with the proposed amendment, manufacturers may not be able to pass all of these costs along to consumers, and would likely need to absorb some, if not all, of their costs.

Regional Employment, Indirect, and Induced Impacts

Since on average, the proposed amendment to Rule 8-3 would not result in significant economic impacts to firms within the affected industries, and consumers could bear some portion of the cost burden, the proposed amendment would not impact affected industry or regional employment. In addition, adoption of the proposed Rule amendment would not result in any additional regional spinoff, or multiplier, impacts.

Impacts to Small Businesses

Using the California Government Code 14835's definition of a small business, approximately 75 percent of all affected firms are small businesses. However, as the ARB and this analysis both assume that compliance costs are small enough not to significantly impact profitability, amending Rule 8-3 would not adversely impact small businesses.

Description of Proposed Rule

Since 1978, the Bay Area Air Quality Management District (BAAQMD) has regulated emissions from volatile organic compounds (VOC) associated with architectural coatings through Regulation 8, Rule 3: Architectural Coatings (Rule 8-3). The Rule, which has been amended eight times since its initial adoption, sets VOC limits on various types of paints and surface preparation solvents used in various types of coatings used on architectural structures including buildings, signs, roadways, and bridges.[1]

BAAQMD proposes to amend Rule 8-3, to further reduce VOC emissions from the application of architectural coatings. The amendment incorporates lower VOC limits and new standards outlined in the California Air Resources Board (ARB) Final Approved Suggested Control Measure for Architectural Coatings (SCM), which was developed in 2007 as a guideline for air districts amending their architectural coating rules. The proposed VOC limits for different coating categories are presented in Table 1.

The BAAQMD is proposing to amend Rule 8-3 to meet the recommendations of the SCM. The amendment would limit VOC emissions from architectural coatings, per the SCM recommended limits as shown in Table 1. Under the proposed amendment, manufacturers would need to begin producing compliant products by 2011. Two product categories have a later compliance date of 2012. In addition, the amendment would also change the definitions of several coating categories, consolidating several categories, and eliminating categories of products no longer sold in California.

Currently, VOC emissions from the application of architectural coatings in the Bay Area total 16.9 tons per day (tpd). The proposed amendment to Rule 8-3 would achieve a reduction in VOC emissions of 5.4 tpd or about 32 percent of the Bay Area's architectural coating emissions.

[1] BAAQMD Regulation 8, Rule 3 Workshop Report, 2008.

Table 1: Proposed Coating Categories and VOC Limits

Proposed Coating Category	Proposed VOC Limits (g/l) Effective Dates	
	10/1/2011	1/1/2012
Flat Coatings	50	
Nonflat Coatings	100	
Nonflat – High Gloss Coatings	150	
SPECIALTY COATINGS		
Aluminum Roof	400	
Basement Specialty Coatings	400	
Bituminous Roof Coatings	50	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealer	50	
Dry Fog Coatings	150	
Faux Finishing Coatings	350	
Fire Restive Coatings	350	
Floor Coatings	100	
Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	100	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	100	
Reactive Penetrating Sealer	350	
Recycled Coatings	250	
Roof Coatings	50	
Rust Preventative Coatings		250

Proposed Coating Category	Proposed VOC Limits (g/l) Effective Dates	
	10/1/2011	1/1/2012
Shellacs:		
Clear	730	
Opaque	550	
Specialty Primers, Sealers and Undercoaters (Specialty PSU)		100
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	100	
Tub and Tile Refinish	420	
Waterproofing Membranes	250	
Wood Coatings	275	
Wood Preservatives	350	
Zinc-Rich Primer	340	

Sources: CARB; BAAQMD; BAE, 2009.

Regional Trends

This section provides background information on the demographic and economic trends for the San Francisco Bay Area, which represents the BAAQMD's District. The San Francisco Bay Area includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, and portions of Solano, and Sonoma Counties. Regional trends are compared to statewide demographic and economic patterns since 2000, in order to show the region's unique characteristics relative to the State.

Regional Demographic Trends

Table 2 shows the population and household trends for the nine county Bay Area and California between 2000 and 2008. During this time, the Bay Area's population increased by 7.6 percent, compared to 12.3 percent in California. Likewise, the number of Bay Area households grew by 7.2 percent, compared to a 10 percent statewide increase.

Table 2: Population and Household Trends, 2000-2008

Bay Area (a)	2000	2008 (est.)	Total Change 2000-2008	Percent Change 2000-2008
Population	6,784,348	7,301,080	516,732	7.6%
Households	2,466,020	2,643,390	177,370	7.2%
Average Household Size	2.69	2.71		
California				
Population	33,873,086	38,049,462	4,176,376	12.3%
Households	11,502,871	12,653,045	1,150,174	10.0%
Average Household Size	2.87	2.94		

Notes:
(a) Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

Sources: California, Department of Finance, 2008; Claritas, 2008; BAE 2008.

The slower growth in the Bay Area is related to its relatively built out environment, compared to the state overall. While central valley locations, such as the Sacramento region, experienced large increases in the number of housing units, the Bay Area, which was relatively built out before the housing boom, only experienced moderate increases in housing units.

Regional Economic Trends

In the five-year period, between the third quarters of 2002 and 2007, the Bay Area's economic base grew by only one percent, increasing from 3.29 million jobs to 3.32 million jobs. This represents slightly slower job growth than the State, which grew by five percent.

Manufacturing, Retail Trade, and Professional, Scientific, and Technical Services, the largest private (non-government) sectors in the Bay Area's economy, each constituted 10 percent of the region's total jobs in 2007. Over the five-year period the Manufacturing sector lost 14 percent of its jobs, while the Retail Trade sector was relatively stagnant, experiencing no growth. However, during this period, the Professional, Scientific, and Technical Services sector grew by 13 percent. Statewide, the Manufacturing sector declined by 11 percent while Retail Trade and Professional, Scientific, and Technical Services grew by six and 18 percent, respectively. Overall, the Bay Area's economic base reflects the state's base, sharing a similar distribution of employment across sectors. Table 3 shows the jobs by sector in 2003 and 2007.

The affected industry, Paint and Coating Manufacturers, falls into the Manufacturing sector. While manufacturing represents a relatively large portion of the region's job base, employment contracted between 2002 and 2007.

Table 3: Jobs by Sector, 2002-2007 (a)

	Bay Area					California				
	Q3 2002 (b)		Q3 2007 (c)		% Change	Q3 2002 (b)		Q3 2007 (c)		% Change
Industry Sector	**Jobs**	**% Total**	**Jobs**	**% Total**	**2002-2007**	**Jobs**	**% Total**	**Jobs**	**% Total**	**2002-2007**
Agriculture, Forestry, Fishing and Hunting	22,190	1%	22,751	1%	3%	443,760	3%	441,795	3%	0%
Mining	1,979	0%	2,132	0%	8%	20,848	0%	25,337	0%	22%
Construction	188,424	6%	198,440	6%	5%	788,601	5%	910,188	6%	15%
Manufacturing	402,800	12%	348,278	10%	-14%	1,641,249	11%	1,466,834	9%	-11%
Utilities	3,990	0%	5,843	0%	46%	54,731	0%	58,097	0%	6%
Wholesale Trade	114,575	3%	125,247	4%	9%	648,400	4%	719,879	5%	11%
Retail Trade	338,662	10%	338,591	10%	0%	1,574,357	11%	1,674,276	11%	6%
Transportation and Warehousing	53,648	2%	54,487	2%	2%	422,830	3%	431,593	3%	2%
Information	121,215	4%	114,415	3%	-6%	489,032	3%	475,166	3%	-3%
Finance and Insurance	147,341	4%	147,137	4%	0%	578,872	4%	614,055	4%	6%
Real Estate and Rental and Leasing	62,440	2%	59,665	2%	-4%	271,219	2%	283,925	2%	5%
Professional, Scientific, and Technical Services	291,463	9%	330,575	10%	13%	900,581	6%	1,059,422	7%	18%
Management of Companies and Enterprises	72,230	2%	58,996	2%	-18%	272,607	2%	206,120	1%	-24%
Administrative and Waste Services	182,563	6%	194,079	6%	6%	953,432	6%	1,000,102	6%	5%
Educational Services	61,709	2%	70,488	2%	14%	210,216	1%	243,996	2%	16%
Health Care and Social Assistance	286,553	9%	297,223	9%	4%	1,251,628	8%	1,374,102	9%	10%
Arts, Entertainment, and Recreation	53,410	2%	55,790	2%	4%	239,946	2%	260,712	2%	9%
Accommodation and Food Services	254,681	8%	283,526	9%	11%	1,163,214	8%	1,321,331	8%	14%
Other Services, except Public Administration	135,387	4%	147,552	4%	9%	621,612	4%	718,747	5%	16%
Unclassified	1516	0%	89	0%	-94%	41,637	0%	52,002	0%	25%
Government (d)	423,260	13%	419,892	13%	-1%	2,263,564	15%	2,306,723	15%	2%
Subtotal	**3,220,036**	**98%**	**3,275,196**	**99%**	**2%**	**0 14,852,336**	**100%**	**15,644,402**	**100%**	**5%**
Additional Suppressed/Confidential Employment (e)	74,055	2%	42,448	1%	-43%	n/a	0%	n/a	0%	
Total, All Employment	**3,294,091**	**100%**	**3,317,644**	**100%**	**1%**	**14,852,336**	**100%**	**15,644,402**	**100%**	**5%**

Notes:
(a) Includes all wage and salary employment covered by unemployment insurance.
(b) Represents employment for third quarter, 2002.
(c) Represents employment for third quarter, 2007.
(d) Government employment includes workers in all local, state and Federal sectors, not just public administration. For example, all public school staff are in the Government category.
(e) County employment for some industries were suppressed by EDD due to the small number of firms reporting in the industry for a given county.

Sources: California Employment Development Department, 2008; BAE, 2008.

Affected Industries

According to the US Census, the Bay Area had 26 Painting and Coating Manufacturing firms that accounted for between 400 and 1,100 jobs in 2006 (See Table 4). It should be noted that the Painting and Coating Manufacturing sector is not limited to architectural coating manufacturers. Of these 26 firms, it is expected that at least eight would be affected by the proposed amendments.

Although the proposed amendment could also impact raw material suppliers, architectural coating distributors, retailers, and contractors, this analysis does not consider the impacts to these firms. For distributors, retailers, and contractors, sales from architectural coatings represent a small portion of revenues. Contractors tend to earn the majority of their revenues from labor and materials costs. In addition, distributors and retailers tend to mark up their products using the standard method of charging consumers roughly double their cost, each, so higher costs could translate into higher revenues.

Finally, it is not possible to accurately project the impacts to raw material suppliers. Suppliers who can provide materials compliant with the proposed regulations could see an increase in demand for their goods, while suppliers who can only provide non-compliant materials may see demand decrease.

Table 4: Profile of Affected Industries, 2006

			Number of Establishments by Size of Workforce							
NAICS	**Industry Description**	**Employment**	**1-4**	**5-9**	**10-19**	**20-49**	**50-99**	**100-249**	**250+**	**Total**
325510	Paint and Coating Manufacturing	411 - 1,056	12	4	2	5	1	2	0	26

Sources: US Census; BAE, 2008.

Socio-Economic Impacts

This section discusses the methodology, economic profile of the affected industry, annualized compliance costs, and estimates the economic impacts associated with the proposed amendment to Rule 8-3.

Methodology

In order to estimate the economic impacts of amending Rule 8-3 on the affected industry, this report compares the affected industry's annualized compliance costs with its profit ratios. The analysis uses data from the BAAQMD, US Census County Business Patterns, the IRS, and Dun and Bradstreet, a private data vendor.

The BAAQMD identifies the affected industry as Coating Manufacturers (SIC 2851). According to BAAQMD records, there are eight painting and coating manufacturing firms in the Bay Area that would be subject to the proposed amendments. The other painting and coating manufacturing firms do not produce architectural coatings. These firms account for approximately 75 regional jobs.

Economic Profile of Affected Industries

As shown in Table 5, according to Dun &Bradstreet data, the average firm in the Paint and Allied Products sector has approximately 300 employees and average annual sales of approximately $47.7 million.

Table 5: Paint and Allied Products Sales

# of Employees	Number of Businesses	Average Annual Sales (a)	Average # of employees	Total Sales	Total Employees
1-4	1	$360,000	3	$360,000	3
5-9	0	n/a	n/a	n/a	n/a
10-19	3	$1,600,000	12	$4,800,000	35
20-49	3	$5,200,000	28	$15,600,000	84
50-99	0	n/a	n/a	n/a	n/a
100-249	0	n/a	n/a	n/a	n/a
250+	1	$360,900,000	2,350	$360,900,000	2,350
TOTAL	**8**	**$47,707,500**	**309**	**$381,660,000**	**2,472**
Total, not including largest firm	**7**	**$2,965,714**	**17**	**$20,760,000**	**122**

Notes:
(a) Represents a 75 percent sample of the paint and allied products businesses in the Bay Area.
SIC code 2851 (Paints, Varnishes, Lacquers, Enamels, and Allied Products)
Sources; BAAQMD, 2009; Dun and Bradstreet, 2009; BAE, 2009.

However, since the single large firm has revenues nearly 70 times higher than the next largest firm, the analysis used the average revenues from the seven smallest firms to determine whether the proposed rule amendment would impact the average firm. Based on the seven smaller firms, the average firm has approximately 17 employees and annual sales of approximately $3.0 million.

Based on IRS data on total sales and net income for the Paint, Coating, and Adhesive Manufacturing sector, firms average a 6.1 percent rate of return on total sales. Table 6 presents the profits for coating manufacturers of varying sizes based on a 6.1 percent rate of return.

Table 6: Profits of Architectural Coating Manufacturers

# of Employees	Number of Businesses	Average Annual Sales	Avg. Return on Sales	Average Profits	Total Profits
1-4	1	$360,000	6.1%	$21,882	$21,882
5-9	0	n/a	6.1%	n/a	n/a
10-19	3	$1,600,000	6.1%	$97,255	$291,764
20-49	3	$5,200,000	6.1%	$316,077	$948,232
50-99	0	n/a	6.1%	n/a	n/a
100-249	0	n/a	6.1%	n/a	n/a
250+	1	$360,900,000	6.1%	$21,936,983	$21,936,983
TOTAL	**8**	**$47,707,500**	**6.1%**	**$2,899,858**	**$23,198,861**
Total, not including largest firm	**7**	**$2,965,714**	**6.1%**	**$180,268**	**$1,261,878**

Sources: Dun & Bradstreet; IRS; BAE, 2008.

As Table 6 shows, architectural coating manufacturers have annual net profits ranging from $21,800 to $21.9 million, depending on the firm's size, with the average firm netting approximately $180,300 in annual profits.

Description of compliance costs

There are several methodologies to determine the compliance costs associated with amending Rule 8-3. The BAAQMD's Workshop Report specifies that annualized compliance costs will total $4.42 million within the District, and will average $1.12 per pound of VOC reduced. The ARB estimates that statewide impacts, excluding the South Coast Air Quality Management District (SCAQMD) would cost manufacturers approximately $12.3 million annually, and would reduce emissions by approximately 32 percent. BAAQMD's Workshop Report estimates annual costs based on its relative share of emissions, since VOCs for architectural coatings are emitted at the point of use. That is, architectural coatings emit VOCs as they dry, after application. Since the Bay Area has approximately 36 percent of the state's population excluding the SCAQMD, it is

responsible for approximately 36 percent of total statewide emissions. However, the region does not contain 36 percent of architectural coating manufacturers. For this reason, the analysis uses an alternative methodology to determine manufacturer compliance costs.

A second methodology of determining compliance costs is based on the Bay Area's share of coating manufacturers. According to the ARB, there are approximately 147 coating manufacturers in the state who would be impacted by the proposed amendment. Of this total, only eight, or five percent, are located within the Bay Area. Multiplying five percent times the total statewide costs of $12.3 million yields a total regional cost estimate of approximately $700,000 in total annualized manufacturer costs.

A third methodology, and the one used in this analysis, determines the Bay Area's compliance cost using the estimates for the average compliance cost per pound of VOC reduced. It should be noted that implementation costs can vary greatly for each company depending on which categories of products they manufacture. According to the ARB, implementation costs would range between a net saving of $1.37 per pound of VOC reduced to a cost of $13.90 per pound. This analysis uses the average cost per pound reported by ARB of $1.12 to estimate impacts to local manufacturers. Using the ARB's average compliance cost per pound of VOC reduced ($1.12) results in a total estimated compliance cost to affected Bay Area coating manufacturers of $300,000, a much lower estimate than the BAAQMD's estimate overall compliance cost of $4.42 million. This analysis produces a much lower estimate as it only looks at local manufacturing firms' average implementation costs, whereas the BAAQMD's estimate allocates total statewide compliance costs based on the total amount of architectural coatings consumed or VOCs emitted in the Bay Area relative to the state.

Table 7 presents the compliance costs to manufacturing firms using the ARB's average cost per pound methodology. As Table 7 shows, the total annualized compliance costs to manufacturing firms in the Bay Area would be approximately $300,000.

Table 7: Total Annualized Compliance Costs

# of Employees	Number of Businesses	Avg. Annual Emissions (lbs. of VOC)	Avg. Annual Cost per lb. of VOC reduced	Avg. Percentage of VOC reduced	Total Compliance Costs
1-4	1	440	$1.12	32%	$158
5-9	0	n/a	n/a	32%	n/a
10-19	3	7,460	$1.12	32%	$8,021
20-49	3	21,853	$1.12	32%	$23,497
50-99	0	n/a	n/a	32%	n/a
100-249	0	n/a	n/a	32%	n/a
250+	1	766,000	$1.12	32%	$274,534
Average	**8**	**106,798**	**$1.12**	**32%**	**$306,210**
Average, not including largest firm	**7**	**12,626**	**$1.12**	**32%**	**$31,675**

Sources: Dun & Bradstreet, 2009; IRS, 2008; California Air Resources Board, 2008; BAAQMD, 2009; BAE, 2009.

Affected Industry Economic Impact analysis

In order to determine the impacts of facilities of various sizes, this analysis uses average revenue estimates from Dun & Bradstreet, in conjunction with IRS profit ratios, to determine whether the estimated annualized compliance costs would result in profit losses of 10 percent or more. The ARB uses the 10 percent threshold as a proxy for burden, where profit losses greater than 10 percent indicate a potential for significant adverse economic impacts. Table 8 shows the annualized compliance costs as a share of total profits. This analysis estimates compliance costs using the ARB's average cost per pound methodology.

Table 8: Total Annualized Compliance Costs as a Share of Profts

# of Employees	Number of Businesses	Total Annual Sales	Total Profits	Total Annualized Compliance Costs	Compliance Costs as a Share of Annual Profits
1-4	1	$360,000	$21,882	$158	0.7%
5-9	0	n/a	n/a	n/a	n/a
10-19	3	$4,800,000	$291,764	$8,021	2.7%
20-49	3	$15,600,000	$948,232	$23,497	2.5%
50-99	0	n/a	n/a	n/a	n/a
100-249	0	n/a	n/a	n/a	n/a
250+	1	$360,900,000	$21,936,983	$274,534	1.3%
Average	**8**	**$381,660,000**	**$23,198,861**	**$306,210**	**1.3%**
Average, not including largest firm	**7**	**$20,760,000**	**$1,261,878**	**$31,675**	**2.5%**

Sources: Dun & Bradstreet, 2009; IRS, 2008; California Air Resources Board, 2008; BAAQMD, 2009; BAE, 2009.

Overall, annualized compliance costs represent approximately 1.3 percent of profits for all firms. The compliance cost ratio is slightly higher for the seven smallest firms at 2.5 percent of profits. Nevertheless, the compliance costs are well below the 10 percent threshold. In addition, to the extent that these firms sell products other than architectural coatings, or that some of their products are currently compliant with the proposed amendment, these impacts could be overstated.

Using the $700,000 total compliance cost estimate, derived from the Bay Area's share of coating manufacturers, would result in average industry impacts of three percent, or 5.7 percent excluding the largest firm. Both of these results still fall below the ARB's 10 percent threshold and could be overstated if products are already compliant with the proposed amendment.

Consumer Impacts

Since consumers buy architectural coating products from manufactures that may be located outside of the region, consumer impacts could be potentially higher than industry impacts. In order to

estimate the potential impacts to consumers, this portion of the analysis assumes that manufacturers would be able to pass along 100 percent of their cost increases to consumers.

The ARB's statewide economic impact analysis for the Architectural Coatings Suggested Control Measure estimates that the change to a consumer's cost per gallon could range from a net saving to $27.30 per reformulated gallon,[2] with an average increase of $1.21 per gallon sold.[3] Since the average gallon currently costs consumers approximately $19.20, this represents a six percent increase in costs. However, since there are currently products on the market already in compliance with the proposed amendment, manufacturers may not be able to pass all of these costs along to consumers and remain competitive. Those manufacturers would likely need to absorb some portion, if not all of their costs.

Affected Industry and Regional Employment Impacts

Since on average, the proposed Rule amendment would not result in significant economic impacts to firms within the affected industries, and consumers could bear some portion compliance cost burden, amending the Rule would not impact the affected industry or regional employment.

Regional Indirect and Induced Impacts

Indirect and induced impacts refer to regional multiplier effects of increasing or decreasing regional economic activity. If the Rule were to significantly impact local businesses, any closures would result in direct regional economic losses. Firms would no longer buy goods from local suppliers, thereby resulting in reduced indirect impacts, or business-to-business expenditures. In addition, firms would no longer employ regional residents, resulting in reduced induced impacts, or household spending.

However, since the proposed amendment to the Rule is not expected to result in significant direct impacts, its adoption would not result in any indirect or induced impacts either.

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[2] Includes distributor and retailer mark-up.

[3] CARB Technical Support Document for Proposed Amendments to the Suggested Control Measure for Architectural Coatings. September, 2007. p. 7-2.

Impact on Small Businesses

According to California Government Code 14835, a small business is any business that meets the following requirements:

- 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 annual gross receipts of $10 million or less over the previous three tax years, or
    - A manufacturer with 100 or fewer employees.

Using these definitions, approximately 75 percent of all affected firms are small businesses. This analysis has shown that firms with lower revenues will experience higher impacts on return on profits as a result of the proposed amendment to the rule.

However, as the ARB and this analysis both assume that consumers could bear some portion of compliance costs, that some firms may already be compliant, and that local firms may also carry products not subject to Rule 8-3, the amendment of Rule 8-3 would not adversely impact small businesses. In addition, on average, the impacts of the proposed Rule amendment fall under the ARB's 10 percent threshold of burden, which indicates that the proposed amendment would not adversely impact firms.

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 3: Architectural Coatings

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Chapter 1
Introduction 1-1
Purpose of This Document 1-1
Scope of This Document 1-1
Impact Terminology 1-2
Organization of This Document 1-2

Chapter 2
Description of the Proposed Rule 2-1
Background 2-1
Process Description 2-1
Architectural Coating Categories 2-2
Objectives 2-4
Proposed Amendments 2-5
Affected Area 2-8

Chapter 3
Environmental Checklist 3-1
Environmental Checklist Form 3-1
Environmental Factors Potentially Affected 3-2
Determination 3-2
I. Aesthetics 3-3
Setting 3-3
Regulatory Background 3-3
Discussion of Impacts 3-3
II. Agriculture Resources 3-5
Setting 3-5
Regulatory Background 3-5
Discussion of Impacts 3-6
III. Air Quality 3-7
Setting 3-7
Regulatory Background 3-15
Discussion of Impacts 3-16
IV. Biological Resources 3-24
Setting 3-24
Regulatory Background 3-25
Discussion of Impacts 3-25
V. Cultural Resources 3-26
Setting 3-26
Regulatory Background 3-26
Discussion of Impacts 3-27

VI. Geology and Soils 3-28
Setting 3-28
Regulatory Background 3-29
Discussion of Impacts 3-30
VII. Hazard and Hazardous Materials 3-31
Setting 3-32
Regulatory Background 3-33
Discussion of Impacts 3-34
VIII. Hydrology and Water Quality 3-39
Setting 3-40
Regulatory Background 3-40
Discussion of Impacts 3-41
IX. Land Use and Planning 3-43
Setting 3-43
Regulatory Background 3-43
Discussion of Impacts 3-43
X. Mineral Resources 3-44
Setting 3-44
Regulatory Background 3-44
Discussion of Impacts 3-44
XI. Noise 3-45
Setting 3-45
Regulatory Background 3-45
Discussion of Impacts 3-46
XII. Population and Housing 3-47
Setting 3-47
Regulatory Background 3-47
Discussion of Impacts 3-47
XIII. Public Services 3-49
Setting 3-49
Regulatory Background 3-49
Discussion of Impacts 3-49
XIV. Recreation 3-51
Setting 3-51
Regulatory Background 3-51
Discussion of Impacts 3-51
XV. Transportation and Traffic 3-52
Setting 3-52
Regulatory Background 3-52
Discussion of Impacts 3-52
XVI. Utilities and Service Systems 3-55
Setting 3-55
Regulatory Background 3-56
Discussion of Impacts 3-56

XVII. Mandatory Findings of Significance 3-57
Discussion of Impacts 3-57

Chapter 4
References 4-1

FIGURES:

Figure 1 – Bay Area Air Quality Management District 2-9

TABLES:

Table 2-1 Proposed VOC Limits for Architectural Coatings 2-5
Table 2-2 Proposed New Architectural Coating Categories and Definitions 2-7
Table 2-3 Architectural Coating Categories Proposed to be Eliminated 2-8
Table 3-1 Federal and State Ambient Air Quality Standards 3-11
Table 3-2 Bay Area Air Pollution Summary - 2007 3-12
Table 3-3 Ten-Year Bay Area Air Quality Summary 3-13
Table 3-4 Summary of 2003 BAAQMD Ambient Air Toxics Monitoring Data 3-14
Table 3-5 VOC Emission Reductions by Product Category 3-17
Table 3-6 Compliance with Suggested Control Measure Limits for Architectural Coatings 3-19
Table 3-7 Toxicity of Conventional and Replacement Solvents 3-22
Table 3-8 Chemical Characteristics for Common Solvents 3-35

CHAPTER 1

INTRODUCTION

PURPOSE OF THIS DOCUMENT

This Negative Declaration assesses the environmental impacts of the proposed adoption of amendments to Regulation 8, Rule 3 (Regulation 8-3) – Architectural Coatings 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 8-3, 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.

CHAPTER 2

DESCRIPTION OF THE PROPOSED RULE

BACKGROUND

The Bay Area Air Quality Management District (District or BAAQMD) regulates emissions of volatile organic compounds (VOC) from architectural coatings through limits contained in Regulation 8, Rule 3: Architectural Coatings (Regulation 8-3). Regulation 8-3, which was adopted on March 1, 1978, sets limits on the amount of VOCs that are allowed in various types of coatings used on architectural structures, such as buildings, signs, bridges, and roadways, in the Bay Area. The current inventory of VOC emissions from architectural coatings in the Bay Area is approximately 16.9 tons per day (tpd).

Control of VOC emissions from architectural coatings is primarily the responsibility of the BAAQMD in the Bay Area. The California Air Resources Board (CARB) is responsible for serving as an oversight agency and providing assistance to the District. One way that CARB provides assistance is by developing a Suggested Control Measure (SCM) for architectural coatings. The SCM serves as a model rule that can be used by BAAQMD. CARB approved a SCM for architectural coatings in 1977 and, as technology advanced, amended it in 1985, 1989, 2000, and 2007. While CARB provides support to the District by developing the SCM, the District is responsible for adopting, implementing, and enforcing architectural coating rules in the Bay Area.

The proposed amendments to Regulation 8-3 would further limit the amount of VOCs that would be allowed in architectural coatings. The proposed VOC limits are based on the emission standards recommended by the Final Approved SCM for Architectural Coatings developed by the CARB in 2007. The proposed amendments would result in a VOC emission reduction of 5.4 tpd, or about a 32 percent reduction (BAAQMD, 2008).

PROCESS DESCRIPTION

Architectural coatings are products that are applied to stationary structures and their accessories. The source category of architectural coatings includes house paints, stains, roof coatings, industrial maintenance coatings, traffic coatings, primers, waterproofing, and many other products. Architectural coatings are used for aesthetics, for protection, and for labeling on stationary structures such as buildings, fences, and roadways. When these coatings are applied, VOCs are emitted from the coatings and from solvents that are used for thinning and clean-up.

Although many architectural coatings are waterborne products, they may contain additives that contribute to a small VOC content. These additives include resins, coalescing aids, polymer plasticizers, freeze-thaw stabilizers and anti-foam agents. These additives are included to create homogeneous films, improve block and print resistance, prevent coagulation, ease application, and reduce defects formed during application. Other VOC additives include preservatives, thickeners and colorants. Freeze-thaw stabilizers and resin-coalescing aids are major contributors to the VOC content and include ethylene glycol or propylene glycol which prevent the paint from coagulating or solidifying under freezing temperatures and provide more "open time" for proper setting and drying.

Over 40 categories of coatings are regulated under Regulation 8-3. The five largest coating categories in terms of VOC emissions:

1. Flat
2. Non-flat - medium gloss
3. Non-flat - low gloss
4. Rust Preventative Coatings
5. Wood Coatings.

These five categories account for over 75 percent of the emissions from architectural coatings in the Bay Area (BAAQMD, 2008).

ARCHITECTURAL COATING CATEGORIES

Types of Architectural Coating Categories

Flat Coatings

Flat coatings are generally used in low traffic areas and for decorative purposes. Flat coatings leave a matte finish, with no gloss or shine, both of which tend to emphasize surface irregularities and imperfections. Flat coatings are widely used on both residential and commercial buildings to paint interior and exterior surfaces. Flats are not generally used in bathrooms or kitchens because they generally have less moisture resistance than gloss coatings.

Most flat coatings are formulated to be waterborne products that allow application equipment to be cleaned using soap and water. Flat coatings can be brushed, rolled, or sprayed onto surfaces, such as walls and ceilings. Application typically requires surfaces that are cured, firm, dry, and free of dust, dirt, oil, grease, wax, chalk, mildew or anything that could contaminate or affect the performance of the coating.

Although many flat coatings are waterborne products, they may contain additives that contribute to a small VOC content. These additives include resins, coalescing aids, polymer plasticizers, freeze-thaw stabilizers and anti-foam agents. These additives are

included to create homogeneous films, improve block and print resistance, prevent coagulation, ease application, and reduce defects formed during application. Other VOC additives include preservatives, thickeners and colorants. Freeze-thaw stabilizers and resin-coalescing aids are major contributors to the VOC content and include ethylene glycol or propylene glycol which prevent the paint from coagulating or solidifying under freezing temperatures and provide more "open time" for proper setting and drying.

In developing the SCM, CARB conducted a survey of all architectural coatings sold in California. The survey reported 15 solvent-based flat coatings (0.01 percent of flat coatings by volume) that contributed two percent of the VOC emissions from flat coatings. Waterborne flat coatings, with over 2770 products, contributed about 15 percent of the total VOC emissions from architectural coatings (2.71 tpd) (BAAQMD, 2008).

Non-flat Coatings

The non-flat coatings category includes both non-flat and non-flat – high gloss coatings. Non-flat coatings are typically used in high traffic areas that require frequent cleaning or where moisture is present. Typical residential use includes family rooms, children's rooms, kitchens, bathrooms, high traffic hallways and laundry rooms. Typical use in commercial buildings and institutional facilities includes walls, corridors and stairwells. Non-flat – high gloss coatings have a gloss rating of 70 or more and require more resin to create a glossy appearance, and, consequently, more coalescing solvent to dissolve and suspend the resin. Non-flat – high gloss coatings have a higher VOC limit than other non-flats.

The most common resins used are vinyl-acrylic or acrylic latexes. Additives containing VOCs include resin coalescing aids, polymer plasticizers, freeze/thaw stabilizers and anti-foam agents. Additives help to create homogeneous films, improve block and print resistance, prevent coagulation, ease application, and reduce defect formation during application. Other VOC-containing additives include thickeners and colorants.

The vast majority of non-flat coatings are formulated as waterborne coatings, over 99 percent. Non-flat coatings emit 3.72 tpd VOC. Non-flat – high gloss coatings account for less than 1.6 percent of the total volume of architectural coatings and emit 1.07 tpd VOC.

Rust Preventative Coatings

Rust preventative coatings are used to provide corrosion protection for metal substrates such as wrought iron and exposed pipes. This category excludes coatings that are recommended for any nonmetallic substrate. Rust preventative coatings are applied directly to interior and exterior metal, or over previously coated surfaces that exhibit corrosion. The finish can range from flat to glossy and the coatings can be applied with a brush, roller, or spray gun. Rust preventative coatings are used by homeowners, contractors, maintenance personnel, and professional painters.

This category was originally intended for those who are not professional paint contractors, such as homeowners and maintenance personnel. The intent was to provide an effective, single component product that would prevent corrosion of metal substrates for residential and commercial uses, not heavy industrial uses such as bridge and structural steel painting. However, after implementation of the 2000 SCM, ARB staff found that products from other categories were shifted to the rust preventative category which still allowed for the use of higher VOC solventborne alkyd technology. After the industrial maintenance 250 g/l limit became effective in 2004, many industrial maintenance products were re-labeled as rust preventative coatings. Based on ARB's survey, rust preventative coatings are primarily solventborne coatings that would not meet the lower industrial maintenance VOC limit. Coatings sold under this category also include primers, sealers and undercoaters that were shifted from other categories with lower VOC limits.

Some products in this category contain a corrosion inhibitor. Corrosion inhibitors are additives that alleviate or retard the electrochemical oxidation of metals by forming an electrically insulating and/or chemically impermeable coating on exposed metal surfaces to suppress electrochemical reactions. Common materials used for this purpose are chromates, phosphates, and a wide range of specially-designed chemicals that resemble surfactants. Some inhibitors are added to waterborne rust preventative coatings to prevent corrosion that occurs during the drying process.

Traditional coatings in this category use alkyd resins for their good performance combined with ease of application. Most of these are solventborne and have VOC contents above 300 g/l.

Currently, 96 percent of rust preventative coatings are solventborne. This coating category is estimated to emit 1.23 tpd VOC.

Wood Coatings

As the name implies, wood coatings are formulated for application to wood, bamboo, cork and wood products, such as plywood, particle board wood composite, and hardboard. Wood coatings can be used both indoor and outdoors. Wood coatings are used for decorative purposes and to provide some protection from abrasion, staining, moisture, dirt, and common chemicals. Wood coatings cover a wide range of applications and functions. Clear wood coatings include lacquers, sanding sealers, penetrating oils, varnishes, stain controllers/wood conditioners, clear stains, and waterproofing sealers. Most opaque wood coatings are lacquers and lacquer undercoaters, but opaque sanding sealers and opaque conversion varnishes are also available.

The wood coatings category includes clear and semitransparent lacquers, varnishes, sanding sealers; penetrating oils; clear stains; wood conditioners used as undercoats; and wood sealers used as topcoats. The wood coatings category also includes opaque wood coatings such as opaque lacquers, sanding sealers, and lacquer undercoaters. The wood

coatings category does not include clear sealers that are labeled and formulated for use on concrete/masonry surfaces, or coatings intended for substrates other than wood.

Seventy three percent of wood coatings sold are solventborne, and this coating category is responsible for 1.26 tpd of VOC emissions.

OBJECTIVES

BAAQMD is proposing amendments to Regulation 8-3 to incorporate recent changes in CARB's Architectural Coatings SCM. These amendments propose to reduce emissions of VOCs from architectural coatings used and produced for use in the Bay Area. The Bay Area is a non-attainment area for the state one-hour and eight-hour ozone standards and federal eight-hour ozone standard. The proposed amendments are expected to result in a VOC emission reduction of 5.4 tpd, or about 32 percent of the 16.9 tpd inventory for this source category.

PROPOSED AMENDMENTS

VOC Limits

The VOC limits recommended by the 2007 Architectural Coatings SCM were developed by CARB staff following a detailed assessment of each of the coating categories. Manufacturers of architectural coatings are expected to comply with the proposed limits by reformulating their products to replace some of the VOCs with water or exempt compounds, or increasing the amount of resin and pigmented solids contained in the coatings. However, many coating products already comply with the VOC limits and, therefore, no reformulation is necessary.

The proposed VOC limits are provided in Table 2-1. The proposed amendments would set VOC limits for more than 40 coating categories. Categories listed in boldface in Table 2-1 indicate coating categories VOC limits that are more stringent than the VOC limits currently contained in Regulation 8-3 or categories that were either combined or eliminated.

TABLE 2-1
Proposed VOC Limits for Architectural Coatings

Proposed Coating Category: (Coatings listed in **bold face** have a proposed change in VOC limits.)	**Proposed VOC Limits (g/l)**	
	Effective Dates	
	1/1/2011	**1/1/2012**
Flat Coatings	**50**	
Nonflat Coatings	**100**	
Nonflat – High Gloss Coatings	**150**	
SPECIALTY COATINGS		
Aluminum Roof	**400**	
Basement Specialty Coatings	**400**	
Bituminous Roof Coatings	**50**	
Bituminous Roof Primers	350	
Bond Breakers	350	
Concrete Curing Compounds	350	
Concrete/Masonry Sealers	100	
Driveway Sealer	**50**	
Dry Fog Coatings	**150**	
Faux Finishing Coatings	350	
Fire Restive Coatings	350	
Floor Coatings	**100**	
Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	
Industrial Maintenance Coatings	250	
Low Solids Coatings	120	

Proposed Coating Category: (Coatings listed in **bold face** have a proposed change in VOC limits.)	**Proposed VOC Limits (g/l)**	
	Effective Dates	
	1/1/2011	**1/1/2012**
Magnesite Cement Coatings	450	
Mastic Texture Coatings	**100**	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	**100**	
Reactive Penetrating Sealer	350	
Recycled Coatings	250	
Roof Coatings	**50**	
Rust Preventative Coatings		**250**
Shellacs: Clear Opaque	 730 550	
Specialty Primers, Sealers and Undercoaters (Specialty PSU)		**100**
Stains	250	
Stone Consolidants	450	
Swimming Pool Coatings	340	
Traffic Marking Coatings	**100**	
Tub and Tile Refinish	**420**	
Waterproofing Membranes	250	
Wood Coatings	**275**	
Wood Preservatives	350	
Zinc-Rich Primer	**340**	

Changes in the Definitions and Coating Categories

CARB added, made changes to, or eliminated architectural coating categories based on information provided in the 2001 and 2005 surveys with the architectural coatings industry. Table 2-2 lists the categories and definitions that are proposed to be added to the rule for new product categories identified in the surveys.

Proposed Coating Category Eliminations

Some of the existing definitions and categories are proposed to be deleted because the categories were either replaced by new categories or were unnecessary because the coatings were no longer sold in California. Table 2-3 provides a listing of the categories that are proposed to be eliminated and the reason for each.

TABLE 2-2

Proposed New Architectural Coating Categories and Definitions

Added Category	Definition
Aluminum Roof	A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon).
Basement Specialty Coating	A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces.
Concrete/Masonry Sealer	A clear or opaque coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions: 1) Prevent penetration of water; or 2) Provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light; or 3) Harden or dustproof the surface of aged or cured concrete.
Driveway Sealer	A coating labeled and formulated for application to worn asphalt driveway surfaces to fill cracks or seal the surface to provide protection; or restore or preserve the appearance.
Reactive Penetrating Sealer	A clear or pigmented coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts. Reactive Penetrating Sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally-occurring minerals in the substrate.
Stone Consolidants	A coating that is labeled and formulated for application to stone substrates to repair historic structures that have been damaged by weathering or other decay mechanisms.
Tub and Tile Refinish	A clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop.
Waterproofing Membrane	A coating that is labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate.
Wood Coatings	Coatings labeled and formulated for application to wood substrates only. The Wood Coatings category includes the following clear and semitransparent coatings: lacquers, varnishes, sanding sealers, penetrating oils; clear stains; wood conditioners used as undercoats, and wood sealers used as topcoats. The Wood Coatings category also includes the following opaque wood coatings: opaque lacquers, opaque sanding sealers, and opaque lacquer undercoaters.
Zinc-Rich Primer	A coating that meets all of the following specifications: Coating contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids and is formulated for application to metal substrates.

TABLE 2-3

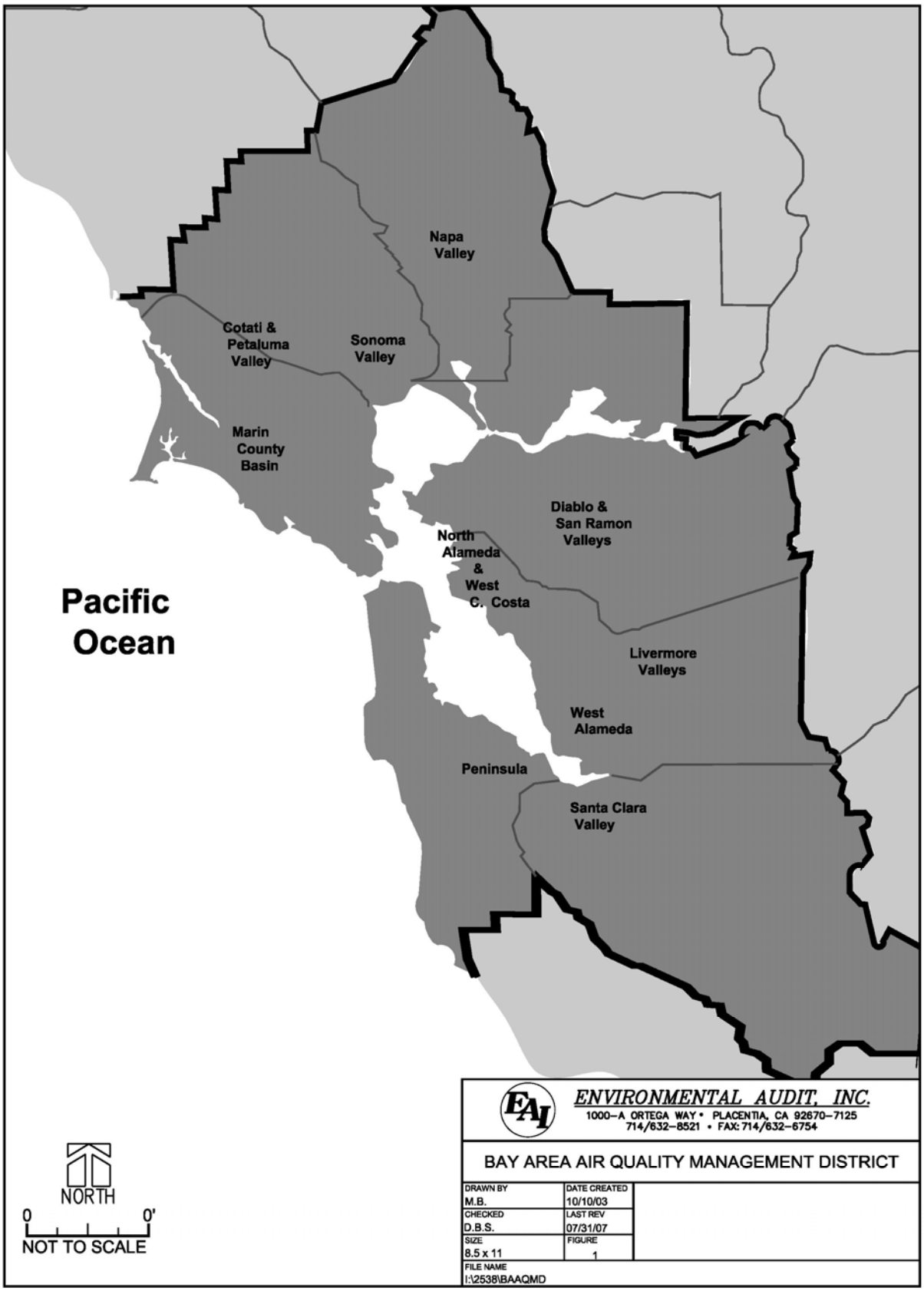
Architectural Coating Categories Proposed to be Eliminated

Deleted Category	Rationale for Removal
Antenna	No products were reported in the 2005 survey. Coatings used for antennas can be addressed under other categories.
Anti fouling	No products were reported in the 2001 survey nor the 2005 survey. Antifouling coatings are primarily addressed by marine coating rules.
Fire-Retardant-Clear Fire-Retardant-Opaque	The Fire Retardant categories are no longer needed. Products with fire retardant properties can comply with VOC limits in the Flat, Non-flat, and other applicable categories.
Flow	No products were reported in the 2005 survey. Flow coatings can be addressed by other categories.
Quick Dry Enamel	This category is no longer needed as these products fall under the Non-flat – High Gloss category.
Quick Dry Primer, Sealer, Undercoater	This category is no longer needed as these products fall under the Primer, Sealer and Undercoater (PSU) and Specialty PSU categories.
Swimming Pool Repair and Maintenance Coatings	This category will be covered under the revised definition of Swimming Pool Coatings.
Temperature Indicator Safety	No products were reported in the 2001 survey nor the 2005 survey. Coatings used for temperature indicatory safety can be addressed by other categories .
Waterproofing Concrete/Masonry Sealers	Most of the products that were formerly classified as Waterproofing Concrete/Masonry Sealers will be addressed by the new Concrete/ Masonry Sealer category. In addition, some products will be reclassified as Basement Specialty Coatings, Industrial Maintenance, Reactive Penetrating Sealer, Stone Consolidants, Wood Coatings, or Waterproofing Membranes.
Waterproofing Sealers	Most of the products that were formerly classified as Waterproofing Sealers will be addressed by the new Concrete/Masonry Sealer category. In addition, some products will be reclassified as Basement Specialty Coatings, Industrial Maintenance, Reactive Penetrating Sealer, Stone Consolidants, Wood Coatings, or Waterproofing Membranes.

AFFECTED AREA

The proposed rule amendments would apply to architectural coatings manufacturer, sold, distributed or used within 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 areas affected by the proposed rule amendments are located within the jurisdiction of the Bay Area Air Quality Management District (see Figure 1).


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 Architectural Coating Regulations.
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:	Victor Douglas, Air Quality Specialist 415-749-4752 or vdouglas@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:	These rule amendments apply to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District.
7. Zoning	The rule amendments apply to architectural coatings used or produced within the jurisdiction of the BAAQMD. Architectural coatings are used in all zoning areas throughout the Bay Area.
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 adverse effect on the environment, and that a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

_____ _____

Printed Name For

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than-Significant Impact	No Impact
I.	**AESTHETICS.**				
	Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☑
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d)	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses.

The proposed rule amendments affect architectural coatings which are applied to architectural structures, such as buildings, signs, bridges, roadways, fences, roofs, swimming pools, et al. Scenic highways or corridors are located in areas affected by the proposed amendments within the District. The architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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 8-3 do not require any changes in the physical environment that would obstruct any scenic vistas or views of interest to the public. Additionally, no major changes to existing architectural coatings operations or stockpiling of

additional materials or products outside of existing facilities are expected. The explanation for this is that the proposed amendments to Regulation 8-3 are not expected to produce any physical changes as the amendments are only expected to alter the formulation of specific architectural coatings and would further reduce VOC emissions from the use of architectural coatings in the Bay Area. Architectural coatings regulated by the proposed amendments for use on an architectural structure are expected to improve the aesthetic view of that structure. Therefore, no significant adverse impacts to visual resources such as scenic views or vistas are expected.

The proposed amendments are not expected to require the construction of any major new structures, 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 primarily impose further limits the amount of VOC's that can be used in architectural coatings.

The proposed amendments to Regulation 8-3 would also not require any new sources of light or glare as they do not require construction of any new buildings or facilities.

Based upon these considerations, no significant adverse aesthetic impacts are expected from the implementation of the amendments to Regulation 8-3.

	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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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 8-3 would further reduce VOC emissions from architectural coatings used and sold throughout the Bay Area. The proposed amendments are not expected to require the construction of any major new equipment and would not require any additional construction activities. Coatings are expected to be reformulated to comply with the proposed regulations, so no construction activities are expected. 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 non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☐	☑

Setting

Meteorological Conditions

The summer climate of the West Coast is dominated by a semi-permanent high centered over the northeastern Pacific Ocean. Because this high pressure cell is quite persistent, storms rarely affect the California coast during the summer. Thus the conditions that persist along the coast of California during summer are a northwest air flow and negligible precipitation. A thermal low pressure area from the Sonoran-Mojave Desert also causes air to flow onshore over the San Francisco Bay Area much of the summer.

In winter, the Pacific High weakens and shifts southward, upwelling ceases, and winter storms become frequent. Almost all of the Bay Area's annual precipitation takes place in the November through April period. During the winter rainy periods, inversions are weak or nonexistent, winds

are often moderate and air pollution potential is very low. During winter periods when the Pacific high becomes dominant, inversions become strong and often are surface based; winds are light and pollution potential is high. These periods are characterized by winds that flow out of the Central Valley into the Bay Area and often include tule fog.

Topography

The San Francisco Bay Area is characterized by complex terrain consisting of coastal mountain ranges, inland valleys, and bays. Elevations of 1,500 feet are common in the higher terrain of this area. Normal wind flow over the area becomes distorted in the lower elevations, especially when the wind velocity is not strong. This distortion is reduced when stronger winds and unstable air masses move over the areas. The distortion is greatest when low level inversions are present with the surface air, beneath the inversion, flowing independently of the air above the inversion.

Winds

In summer, the northwest winds to the west of the Pacific coastline are drawn into the interior through the Golden Gate and over the lower portions of the San Francisco Peninsula. Immediately to the south of Mount Tamalpais, the northwesterly winds accelerate considerably and come more nearly from the west as they stream through the Golden Gate. This channeling of the flow through the Golden Gate produces a jet that sweeps eastward but widens downstream producing southwest winds at Berkeley and northwest winds at San Jose; a branch curves eastward through the Carquinez Straits and into the Central Valley. Wind speeds may be locally strong in regions where air is channeled through a narrow opening such as the Carquinez Strait, the Golden Gate, or San Bruno Gap.

In winter, the Bay Area experiences periods of storminess and moderate-to-strong winds and periods of stagnation with very light winds. Winter stagnation episodes are characterized by outflow from the Central Valley, nighttime drainage flows in coastal valleys, weak onshore flows in the afternoon and otherwise light and variable winds.

Temperature

In summer, the distribution of temperature near the surface over the Bay Area is determined in large part by the effect of the differential heating between land and water surfaces. This process produces a large-scale gradient between the coast and the Central Valley as well as small-scale local gradients along the shorelines of the ocean and bays. The winter mean temperature high and lows reverse the summer relationship; daytime variations are small while mean minimum nighttime temperatures show large differences and strong gradients. The moderating effect of the ocean influences warmer minimums along the coast and penetrating the Bay. The coldest temperatures are in the sheltered valleys, implying strong radiation inversions and very limited vertical diffusion.

Inversions

A primary factor in air quality is the mixing depth, i.e., the vertical dimension available for dilution of contaminant sources near the ground. Over the Bay Area, the frequent occurrence of temperature inversions limits this mixing depth and consequently limits the availability of air for dilution. A temperature inversion may be described as a layer or layers of warmer air over cooler air.

Precipitation

The San Francisco Bay Area climate is characterized by moderately wet winters and dry summers. Winter rains (December through March) account for about 75 percent of the average annual rainfall; about 90 percent of the annual total rainfall is received in November to April period; and between June and September, normal rainfall is typically less than 0.10 inches. Annual precipitation amounts show greater differences in short distances. Annual totals exceed 40 inches in the mountains and are less than 15 inches in the sheltered valleys.

Pollution Potential

The Bay Area is subject to a combination of physiographic and climatic factors which result in a low potential for pollutant buildups near the coast and a high potential in sheltered inland valleys. In summer, areas with high average maximum temperatures tend to be sheltered inland valleys with abundant sunshine and light winds. Areas with low average maximum temperatures are exposed to the prevailing ocean breeze and experience frequent fog or stratus. Locations with warm summer days have a higher pollution potential than the cooler locations along the coast and bays.

In winter, pollution potential is related to the nighttime minimum temperature. Low minimum temperatures are associated with strong radiation inversions in inland valleys that are protected from the moderating influences of the ocean and bays. Conversely, coastal locations experience higher average nighttime temperatures, weaker inversions, stronger breezes and consequently less air pollution potential.

Air Quality

Criteria Pollutants

It is the responsibility of the BAAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns in diameter (PM10), particulate matter less than 2.5 microns in diameter (PM2.5), sulfur dioxide (SO_2) and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards. California has also established standards for sulfate, visibility, hydrogen sulfide, and vinyl chloride.

The state and national ambient air quality standards for each of these pollutants and their effects on health are summarized in Table 3-1. The BAAQMD monitors levels of various criteria pollutants at 25 monitoring stations. The 2007 air quality data from the BAAQMD's monitoring stations are presented in Table 3-2.

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. Ambient concentrations of air pollutants and the number of days on which the region exceeds air quality standards have fallen dramatically (see Table 3-3). The Air District is in attainment of the State and federal ambient air quality standards for CO, nitrogen oxides (NOx), and 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 3-2. All monitoring stations were below the state standard and federal ambient air quality standards for CO, NO_2, and SO_2. The federal 8-hour ozone standard was exceeded one day in the District in 2007, while the state standard was exceeded on nine 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 4 days in 2007 in the District, most frequently in the Eastern District (Livermore) (see Table 3-2).

All monitoring stations were in compliance with the federal PM10 standards. The California PM10 standards were exceeded on four 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 3-2).

TABLE 3-1

Federal and State Ambient Air Quality Standards

	STATE STANDARD	FEDERAL PRIMARY STANDARD	MOST RELEVANT EFFECTS
AIR POLLUTANT	CONCENTRATION/ AVERAGING TIME	CONCENTRATION/ AVERAGING TIME	
Ozone	0.09 ppm, 1-hr. avg. > 0.070 ppm, 8-hr	0.075 ppm, 8-hr avg. >	(a) Short-term exposures: (1) Pulmonary function decrements and localized lung edema in humans and animals (2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; (d) Property damage
Carbon Monoxide	9.0 ppm, 8-hr avg. > 20 ppm, 1-hr avg. >	9 ppm, 8-hr avg.> 35 ppm, 1-hr avg.>	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses
Nitrogen Dioxide	0.25 ppm, 1-hr avg. >	0.053 ppm, ann. avg.>	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration
Sulfur Dioxide	0.04 ppm, 24-hr avg.> 0.25 ppm, 1-hr. avg. >	0.03 ppm, ann. avg.> 0.14 ppm, 24-hr avg.>	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
Suspended Particulate Matter (PM10)	20 $\mu g/m^3$, 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 3-2
Bay Area Air Pollution Summary - 2007

MONITORING STATIONS	OZONE						CARBON MONOXIDE			NITROGEN DIOXIDE			SULFUR DIOXIDE			PM_{10}				$PM_{2.5}$				
	Max 1-hr	Cal 1-hr Days	Max 8-hr	Nat 8-hr Days	Cal Days	3-Yr Avg	Max 1-hr	Max 8-hr	Nat/ Cal Days	Max 1-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	0	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	1.2	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	*	1.1	0.6	0	39	*	0	7*	*	0	*	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	1.3	0	16.8	52	0	2	46.2	7	34.0	8.4	8.9
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	8	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	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	*	*	*
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

* PM2.5 monitoring began at Gilroy on March 1, 2007. Since only three complete quarters of data for 2007are available, annual statistics are not provided for PM2.5.

* The Benicia site was opened on April 1 2007. Since only three complete quarters of data for 2007are available, annual statistics are not provided for this site.

* The San Jose-Tulley site was closed on December 31, 2007.

* The Hayward station was closed part of 2005 due to construction on site. Therefore, three-year average ozone statistics are not available.

TABLE 3-3

Ten-Year Bay Area Air Quality Summary
Days over standards

YEAR	OZONE			CARBON MONOXIDE				NO_X	SULFUR DIOXIDE		PM10		PM2.5
	1-Hr		8-Hr	1-Hr		8-Hr		1-Hr	24-Hr		24-Hr*		24-Hr**
	Nat	Cal	Nat	Nat	Cal	Nat	Cal	Cal	Nat	Cal	Nat	Cal	Nat
1998	8	29	16	0	0	0	0	0	0	0	0	5	-
1999	3	2	9	0	0	0	0	0	0	0	0	12	-
2000	3	12	4	0	0	0	0	0	0	0	0	7	1
2001	1	15	7	0	0	0	0	0	0	0	0	10	5
2002	2	16	7	0	0	0	0	0	0	0	0	6	5
2003	1	19	7	0	0	0	0	0	0	0	0	6	0
2004	0	7	0	0	0	0	0	0	0	0	0	7	1
2005	0	9	1	0	0	0	0	0	0	0	0	6	0
2006	0	18	12	0	0	0	0	0	0	0	0	15	10
2007	1	4	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.
** On Dec. 17, 2006, U.S. EPA revised the PM10 standard from 65 to 35 g/m3. PM2.5 exceedance days for 2006 and 2007 reflect the new standard.

Toxic Air Contaminants

Table 3-4 (BAAQMD, 2007) contains a summary of ambient air toxics monitoring data of TACs measured at monitoring stations in the Bay Area by the District in 2003. One of the primary health risks of concern due to exposure to TACs is the risk of contracting cancer. A number of VOCs currently used in coating and solvent formulations have also been identified as TACs, such as ethylene-based glycol ethers, TCE, and toluene.

Two particular TACs , methylene chloride and perchloroethylene, are used in some consumer products outside of California because these compounds are specifically exempted from U.S. EPA's VOC definition because of their very low ozone-forming capabilities. In California, the CARB rules on consumer products (Title 17, California Code of Regulations, sections 94500 et seq.) do not allow use of these compounds in most consumer products. Regulation 8-3 does not treat these compounds as exempt. As a result, manufacturers are not expected to use methylene chloride or perchloroethylene in reformulation of products to reduce the VOC content in meeting future limits. In addition, product liability and regulations such as California's Proposition 65 are expected to minimize the use of toxic materials because manufacturers would have to provide public notices if any Proposition 65 listed-material is used.

TABLE 3-4

Summary of 2003 BAAQMD Ambient Air Toxics Monitoring Data

Compound	LOD (ppb)(1)	% of Samples < LOD(2)	Max. Conc. (ppb) (3)	Min. Conc. (ppb) (4)	Mean Conc. (ppb) (5)
Acetone	0.30	0	121.4	0.6	6.80
Benzene	0.10	1.78	2.4	0.5	0.401
1,3-butadiene	0.15	75.7	0.89	0.075	0.12
Carbon tetrachloride	0.01	0	0.16	0.09	0.108
Chloroform	0.02	62.5	1.47	0.01	0.024
Ethylbenzene	0.10	44.2	0.90	0.05	0.135
Ethylene dibromide	0.02	100	0.01	0.01	0.01
Ethylene dichloride	0.10	100	0.05	0.05	0.05
Methylene chloride	0.50	82.9	3.40	0.25	0.356
Methyl ethyl ketone	0.20	7.7	5.80	0.1	0.496
Metyl tert-butyl ether	0.30	32.9	4.80	0.15	0.532
Perchloroethylene	0.01	42.4	0.28	0.005	0.026
Toluene	0.10	0.2	6.0	0.05	1.062
1,1,1-Trichloroethane	0.05	72.3	2.47	0.025	0.084
Trichloroethylene	0.05	93.8	0.33	0.025	0.029
Trichlorofluoromethane	0.01	0	.046	0.18	0.266
1,1,2-trichlorotrifluoroethane	0.01	0	1.16	0.06	0.077
Vinyl chloride	0.30	100	0.15	0.15	0.15
m/p-xylene	0.10	2.8	3.40	0.05	0.535
o-xylene	0.10	27.9	1.30	0.05	0.186

NOTES: Table 3-4 summarizes the results of the BAAQMD gaseous toxic air contaminant monitoring network for the year 2003. These data represent monitoring results at 19 of the 20 separate sites at which samples were collected. Data from the Fort Cronkhite "clean-air" background site was not included. Data from the Oakland-Davie Stadium site was available from January through March.

(1) "LOD" is the limit of detection of the analytical method used.
(2) "% of samples < LOD" is the percent of the total number of air samples collected in 2003 that had pollutant concentrations less than the LOD.
(3) "Maximum Conc." is the highest daily concentration measured at any of the 19 monitoring sites.
(4) "Minimum Conc." is the lowest daily concentration measured at any of the 19 monitoring sites.
(5) "Mean Conc." is the arithmetic average of the air samples collected in 2003 at the 19 monitoring sites. In calculating the mean, samples with concentrations less than the LOD were assumed to be equal to one half the LOD concentration.

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.

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 toxic air contaminants (TAC) and high exposures of sensitive populations to TAC and to use this information to help establish policies to guide mitigation strategies that obtain the greatest health benefit from TAC emission reductions. For example, BAAQMD will use information derived from the CARE program to develop and implement targeted risk reduction programs, including grant and incentive programs, community outreach efforts, collaboration with other governmental agencies, model ordinances, new regulations for stationary sources and indirect sources, and advocacy for additional legislation.

Discussion of Impacts

III a. The objectives of the proposed rule amendments are to lower the VOC content limit in architectural coatings used and produced in the Bay Area, by incorporating recent changes in CARB's Architectural Coatings SCM. The proposed amendments would reduce VOC emissions from architectural coatings used within the jurisdiction of the BAAQMD. Consequently, the proposed rule amendments are expected to reduce exposure to VOCs in the region and reduce ozone formation, providing overall health benefits. Therefore, the proposed rule amendments are not expected to conflict with an Air Quality Plan, but instead would further the objectives of the 2005 Ozone Strategy, ultimately reducing ozone concentrations in the Bay Area.

III b and f. The proposed amendments to Regulation 8-3 are expected to reduce VOC emissions from architectural coating used in the Bay Area. The proposed rule amendments would require reductions in the VOC content limit in certain architectural coating categories by January 1, 2011, lowering emissions of VOCs and reducing the related health effects associated with VOC and zone exposure. The proposed amendments would result in a VOC emission reduction of 5.4 tons per day (tpd), or about 32 percent of the 16.9 tpd inventory for this source category. Table 3-5 presents the annual VOC emissions, emissions

reduction and VOC limits per coating category. Although there are emissions reductions from 19 coating categories with changes in the VOC limits, 95 percent of the emissions reductions are attributable to nine categories, which account for over 80 percent of the emissions; these nine categories are highlighted in **boldface** type in Table 3-5.

TABLE 3-5

VOC Emission Reductions by Product Category

Coating Category	**Current VOC Limit** (g/l)	**Proposed VOC Limit** (g/l)	**Current VOC Emissions** (tpd)	**Emission Reductions** (tpd)
Flat Coatings	**100**	**50**	**2.71**	**1.11**
Nonflat Coatings	**150**	**100**	**3.72**	**0.99**
Nonflat - High GlossCoatings	**250**	**150**	**1.07**	**0.32**
SPECIALTY COATINGS				
Aluminum Roof	500	400	0.39	0.07
Basement Specialty Coatings	400	400	0.00	0.00
Bituminous Roof Coatings	300	50	0.08	0.06
Bituminous Roof Primers	350	350	0.05	0.00
Bond Breakers	350	350	0.03	0.00
Concrete Curing Compounds	350	350	0.09	0.00
Concrete / Masonry Sealer	**250-400**	**100**	**0.40**	**0.19**
Driveway Sealer	100	50	0.01	0.00
Dry Fog Coatings	400	150	0.16	0.11
Faux Finishing Coatings	350	350	0.04	0.00
Fire Restive Coatings	350	350	0.00	0.00
Floor Coatings	250	100	0.14	0.02
Form-Release Compounds	250	250	0.16	0.00
Graphic Arts Coatings (Sign Paints)	500	500	0.00	0.00
High Temperature Coatings	420	420	0.01	0.00
Industrial Maintenance Coatings	250	250	0.84	0.00
Low Solids Coatings	120	120	0.01	0.00
Magnesite Cement Coatings	450	450	0.02	0.00
Mastic Texture Coatings	300	100	0.10	0.00
Metallic Pigmented Coatings	500	500	0.02	0.00
Multi-Color Coatings	250	250	0.00	0.00
Pre-Treatment Wash Primers	420	420	0.00	0.00
Primers, Sealers, and Undercoaters	**200**	**100**	**1.42**	**0.40**
Reactive Penetrating Sealer	350	350	0.00	0.00
Recycled Coatings	250	250	0.00	0.00
Roof Coatings	250	50	0.08	0.02
Rust Preventative Coatings	**420**	**250**	**1.23**	**0.56**
Shellacs:				
Clear	730	730	0.05	0.00
Opaque	550	550	0.16	0.00

Coating Category	Current VOC Limit (g/l)	Proposed VOC Limit (g/l)	Current VOC Emissions (tpd)	Emission Reductions (tpd)
Specialty Primers, Sealers and Undercoaters (PSU)	**350**	**100**	**1.21**	**0.94**
Stains	250	250	0.76	0.00
Stone Consolidant	250	450	0.00	0.00
Swimming Pool Coatings	340	340	0.01	0.00
Traffic Marking Coatings	150	100	0.33	0.03
Tub and Tile Refinish	250	420	0.00	0.00
Waterproofing Membranes	250	250	0.23	0.03
Wood Coatings	**350-650**	**275**	**1.26**	**0.50**
Wood Preservatives	350	350	0.11	0.00
Zinc-Rich Primer	500	340	0.01	0.00
		TOTAL	**16.9**	**5.4**

The proposed amendments are not expected to require substantial changes or any major construction activities at affected facilities. Coating manufacturers would be able to lower the VOC content limit in certain architectural coating categories with existing equipment and facilities. Since the affected facilities would be able to implement the amendments to Regulation 8-3 without installing new equipment or modifying or building new facilities, no additional construction emissions are expected as a result of the proposed rule amendments. Although no adverse air quality impact is expected, minor construction activity could result from upgrades at an architectural coating facility to comply with safety regulations designed to prevent fires or a risk of upset. Examples of such upgrades include the installation of sprinklers, vents, fire walls, alarms, etc. The proposed rule amendments are not expected to alter or increase the construction emissions from new facilities nor will the proposed project provide an incentive to construct new architectural coating facilities. A new architectural coating facility would likely be required to undergo a siting review and approval by the local cities or counties (with or without the proposed rule amendments).

The amendments to Regulation 8-3 are based on the SCM for Architectural Coatings developed by CARB (CARB, 2007a). To obtain further VOC emissions from coating products it is expected that coatings would be reformulated with water-based or exempt compound formulations (e.g., acetone). During the development of CARB's SCM for Architectural Coatings, industry comments raised concerns regarding a number of issues associated with the use of lower VOC content limits for coating products including: (1) the use of lower VOC coatings will result in a thicker film coating; (2) the use of lower VOC coatings will result in excessive thinning of the coating; (3) the use of lower VOC coatings requires the use of additional primer for proper adhesion to the substrate; (4) lower VOC coatings will require the use of more coats; (5) the use of lower VOC coatings will require more frequent recoating, touch-up and repair work; (6) the use of lower VOC coatings will result in product substitution by end-users; and (7) the use of lower-VOC coatings may result in coatings with higher reactivity (CARB, 2007). These issues have been studied by the U.S. EPA, CARB, and SCAQMD as part of rulemaking activities (Federal Register, CARB 2007, SCAQMD 1999).

CARB staff evaluated manufacturers' product data sheets and available testing data for low VOC coatings. CARB concluded that these coatings had substrate preparation, coverage rates and performance similar to

their higher VOC counterparts without the need for excessive thinning. In addition, there are compliant coatings available (see Table 3-6).

TABLE 3-6[(1)]
Compliance with Suggested Control Measure Limits for Architectural Coatings

Coating Category	Current VOC Limit (g/l, less water)	Proposed VOC Limit (g/l, less water)		Complying Products		
		Effective Date 1/1/2011	Effective Date 1/1/2012	Total Number	Percentage	Marketshare (%) by Volume
Aluminum Roof Coatings	500	400	--	13	21%	31%
Antenna Coatings (Deleted effective 10/1/2010)	530	N/A	--	--	--	--
Antifouling Coatings (Deleted effective 10/1/2010)	400	N/A	--	--	--	--
Basement Specialty Coatings	400	400	--	9	100%	100%
Bituminous Roof Coatings	300	50	--	35	44%	90%
Bituminous Roof Primers	350	350	--	15	48%	79%
Bond Breakers	350	350	--	9	69%	73%
Clear Wood Coatings (Deleted effective 10/1/2010)			--	--	--	--
• Clear Brushing Lacquers	680	N/A				
• Lacquers (including lacquer sanding sealers)	550	N/A				
• Sanding Sealers (other than lacquer sanding sealers)	350	N/A				
• Varnishes	350	N/A				
Concrete Curing Compounds	350	350	--	121	106%	99%
Concrete/Masonry Sealer	250-400	100	--	133	25%	41%
Driveway Sealer	100	50	--	38	93%	100%
Dry Fog Coatings	400	150	--	27	38%	42%
Faux Finishing Coatings	350	350	--	261	43%	98%
Fire Resistive Coatings	350	350	--	8	89%	99%
Fire Retardant Coatings: (Deleted effective 10/1/2010)			--	--	--	--
• Clear	650	N/A				
• Opaque	350	N/A				
Flat Coatings	100	50	--	358	13%	7%
Floor Coatings	250	100	--	168	44%	85%
Flow Coatings (Deleted effective 10/1/2010)	420	N/A	--	--	--	--
Form-Release Compounds	250	250	--	34	87%	97%
Graphic Arts Coatings (Sign Paints)	500	500	--	134	100%	100%
High Temperature Coatings	420	420	--	18	22%	90%
Industrial Maintenance Coatings	250	250	--	1654	51%	69%
Low Solids Coatings	120	120	--	33	100%	100%
Magnesite Cement Coatings	450	450	--	16	100%	100%
Mastic Texture Coatings	300	100	--	40	65%	79%
Metallic Pigmented Coatings	500	500	--	61	73%	99%
Multi-Color Coatings	250	250	--	9	69%	100%
Nonflat Coatings	150	100	--	958	26%	28%

TABLE 3-6[(1)]
Compliance with Suggested Control Measure Limits for Architectural Coatings

Coating Category	Current VOC Limit (g/l, less water)	Proposed VOC Limit (g/l, less water)		Complying Products		
		Effective Date 1/1/2011	Effective Date 1/1/2012	Total Number	Percentage	Marketshare (%) by Volume
Nonflat - High Gloss Coatings	250	150	--	94	16%	28%
Pre-Treatment Wash Primer	420	420	--	2	20%	99%
Primers, Sealers, and Undercoaters	200	100	--	310	43%	36%
Quick Dry Enamels (Deleted effective 10/1/2010)	250	N/A	--	--	--	--
Quick Dry Primers, Sealers, and Undercoaters (Deleted effective 10/1/2010)	200	N/A	--	--	--	--
Reactive Penetrating Sealer [2]	250-400	350	--	20	91% [3]	93%
Recycled	250	250	--	7	100%	100%
Roof	250	50	--	112	53%	83%
Rust Preventative	400	--	250	52	8%	3%
Shellacs:			--			
• Clear	730	730		8	100%	100%
• Opaque	550	550		2	100%	100%
Specialty Primers, Sealers, and Undercoaters	350	--	100	25	21%	22%
Stains			--			
• Clear / Semitransparent	250	250		308	23% [1]	74%
• Opaque	250	250		327	76%	98%
Stone Consolidant [2]	100-400	450	--	2	100% [3]	100%
Swimming Pool Coatings	340	340	--	29	73%	89%
Swimming Pool Repair and Maintenance Coatings (Deleted effective 10/1/2010)	340	N/A	--	--	--	--
Temperature Indicator Safety Coatings (Deleted effective 10/1/2010)	550	N/A	--	--	--	--
Traffic Marking	150	100	--	158	64%	74%
Tub and Tile Refinish [2]	100-250	420	--	N/A [3]	N/A [3]	N/A [3]
Waterproofing Membranes [2]	250-400	250	--	24	65%	68%
Waterproofing Sealers (Deleted effective 10/1/2010)	250	N/A	--	--	--	--
Waterproofing Concrete/Masonry Sealers (Deleted effective 10/1/2010)	400	N/A	--	--	--	--
Wood Coatings	250-680	275	--	307	25%	50%
Wood Preservatives	350	350	--	26	87%	98%
Zinc-Rich Primer	500	340	--	30	44%	54%

1. Source: CARB, 2007.
2. New category.
3. Limited survey data for new categories.

CARB's analysis indicated that the total reactivity of the lower VOC architectural coatings will be less than the reactivity of the higher VOC architectural coatings. Thus, CARB concluded that the indirect increase in VOC emissions, if any, would be less than significant from these areas of concern (CARB, 2007).

It has been asserted in the past that not only should each of the issues (i.e., more thickness, illegal thinning, more priming, more topcoats, more touch-up and repair, more frequent recoating, more substitution, and more reactivity) be analyzed separately but that the synergistic effect of all issues be analyzed. CARB staff analysis determined that based on the National Technical Service (NTS) data and review of product data sheet, the low-VOC compliant coatings have comparable performance as conventional coatings. Therefore, since individually each issue does not result in a significant adverse air quality impact, the synergistic effect of all eight issues will not result in significant adverse air quality impacts (CARB, 2000). Even if it is assumed that some of the alleged activities do occur, e.g., illegal thinning, substitution, etc., the net overall effect of the proposed amendments is expected to be a reduction in VOC emissions.

Based on the preceding analysis of potential secondary air quality impacts from implementing future architectural coatings rules, it is concluded that the overall air quality effects will be a VOC emission reduction. Therefore, based on the significance criteria, impacts associated with the use of lower VOC coatings will be less than significant.

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

The proposed rule amendments are not expected to result in an increase in greenhouse gas (GHG) emissions. GHG emissions are largely generated by the combustion of conventional hydrocarbon fuel that results in the release of energy as bonds between carbon and hydrogen are broken and reformed with oxygen to create water vapor and the carbon dioxide (CO_2). Greenhouse gases, which alter the amount of heat, or infrared radiation, that can escape the Earth's surface, have been linked to a gradual warming of the Earth's surface and lower atmosphere. In the United States, the largest source of greenhouse gas emissions is from fossil fuel combustion, which accounted for approximately 81 percent of greenhouse emissions in 1996 (CARB, 2006a). CO_2 is not commonly used in architectural coating production. The reformulation of architectural coatings is not expected to require the combustion of additional fuel nor increase the generation of GHGs. No increase in the use or production of architectural coatings is expected due the proposed amendments to Regulation 8-3. Therefore, the proposed rule amendments are not expected to result in an increase in GHG emissions.

III d. The proposed amendments are expected to lead to a reduction in VOCs and reduced exposure to sensitive populations. Most facilities are expected to comply with the proposed amendments to Regulation 8-3 by lowering the VOC content limit in certain architectural coating categories manufactured and used in the Bay Area. A number of VOCs currently used in coating and solvent formulations have also been identified as TACs, such as ethylene-based glycol ethers, TCE, and toluene. When a product is reformulated to meet new VOC limits, however, a manufacturer could theoretically use a chemical, not used before, that may be a toxic air contaminant. However, the proposed amendments to Regulation 8-3 do not provide exemptions to compounds that are TACs, so there is no incentive to use TACs.

Conventional solvents include chemicals such as toluene, xylene, methyl alcohol, Stoddard Solvent, methyl ethyl ketone (MEK), isopropyl alcohol, ethylene glycol monobutyl ether (EGBE), ethylene glycol monomethyl ether (EGME), and ethylene glycol monoethyl ether (EGEE). The coatings and solvents being reformulated to comply with the proposed amendments are such chemicals as propylene glycol monomethyl

ethers, de-propylene glycol monomethyl ethers (DPM), methyl esters (soy-based) acetone, 3-ethoxypropanoic acid (an ethyl ester), and isopropyl alcohol, as well as water. Table 3-7 provides a summary of toxicity data associated with conventional coatings and products commonly used in reformulated coatings and surface preparation and cleaning solvents.

TABLE 3-7

Toxicity of Conventional and Replacement Solvents

Solvents	TLV (ACGIH) (ppm)	PEL (OSHA) (ppm)	STEL[2] (ACGIH) (ppm)	IDLH (NIOSH) (ppm)
Conventional Solvents				
Toluene	50	200		500
Xylene	100	100	150	900
MEK	200	200	300	3000
Stoddard Solvent	100	500	Not Available	3448
Ethyl Alcohol	1000	1000	Not Available	3300[3]
Methyl Alcohol	200	200	250	6000[3]
Isopropyl Alcohol	400	400	500	2000[3]
EGBE	25	50	Not Available	700
EGEE	5	200	Not Available	500
EGME	5	25	Not Available	200
Replacement Solvents				
Acetone	750	1000	1000	2500[3]
Texanol	Not Established	Not Established	Not Established	Not Established
Di-Propylene Glycol	Not Established	Not Established	Not Established	Not Established
Propylene Glycol	3.21[1]	Not Established	Not Established	Not Established
Ethylene Glycol	39	Not Established	Not Available	Not Established
PCBTF	25[4]	Not Established	Not Established	Not Established
1,1,1-trichloroethane	350	350	450	700
Methylene Chloride	50	500	Not Available	2300
n-Butyl Acetate	150	150	200	1700[3]
t-Butyl Acetate	200	200	Not Available	1500[3]
Isobutyl Acetate	150	200	250	1300[3]
Methyl Acetate	200	200	250	3100[3]
TDI	0.005	0.02	0.02	2.5
HDI	0.005[4]	Not Established	Not Established	Not Established
MDI	0.005	0.02	0.02	7.33

(1) 2007 AIHA Workplace Environmental Exposure Level; (2) STEL = short-term exposure limit (usually 15 minutes); and (3) Based on 10 percent of the lower explosive limit.

In general replacement solvents for reformulated products are for the most part common chemicals used in a wide variety of industrial and consumer applications. Their widespread uses indicates that users have the ability to use these compounds in a safe manner. Current cleaning formulations contain materials that are as toxic as, or more toxic than, formulations expected to be used to comply with proposed amendments to Regulation 8-3. Thus, any theoretical increased use of potentially toxic materials in reformulated

solvents/coatings would be balanced by a concurrent decrease in the use of materials in currently used products that are typically more toxic, so TAC impacts would not be expected to increase compared to existing conditions. According to the most recent studies conducted for the technological assessment, the new compliant cleaners are being formulated with water-based solutions, soy-based (composed of methyl esters), acetone, methyl acetate, and isopropyl alcohol blends with acetone and water which have a low toxicity (SCAQMD, 2006). The human health impacts analysis performed in the Final EIR for the 2000 SCM for Architectural Coatings examined the potential increased long-term (carcinogenic and chronic) and short-term (acute) human health impacts associated with the use of various replacement solvents in compliant coating formulations. It was concluded that the general public and coating applicators would not be exposed to either long-term or short-term health risk due to the application of compliant coatings (CARB, 2007).

CARB expects that future compliant materials will contain less hazardous materials (or will contain non-hazardous materials) as compared to previous solvent-borne coatings, and cleaning solvents, resulting in an environmental benefit because the reformulated coatings and solvents are less toxic than previous solvent-borne coatings and solvents. The long-term and short-term human health impacts associated with the use of various replacement solvents in compliant coating formulations were evaluated by CARB. It was concluded that the general public and coating applicators would not be exposed to either long-term (carcinogenic or chronic) or short-term (acute) health risks due to exposure to alternative solvents (CARB, 2007 and SCAQMD 1999). In addition, a number of cleaners are water-based which is not expected to generate toxic air contaminants. Therefore, the proposed control measures for architectural coatings are not expected to result in an increase in toxic air contaminants.

These changes are expected to minimize exposure to sensitive receptors to substantial pollutant concentrations, so no significant adverse impacts are expected.

III e. The proposed amendments are not expected to result in an increase in odors. The proposed amendments to Regulation 8-3 are expected to reduce VOC emissions from the use of architectural coatings. The use of architectural coatings with lower VOC limits are expected to generate less VOC emissions and ultimately reduce the potential for 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 ultimately reducing ozone formation.

	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 entire area under the jurisdiction of the BAAQMD is affected by the proposed rule amendments, and is located within 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. A majority of the affected areas have been graded to develop various commercial or residential 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 architectural coatings. The proposed amendments are not expected to require the construction of any major new facilities and would not require construction activities outside of existing facilities. Most areas where architectural coatings are used have typically been graded and developed, and biological resources, with the exception of landscape species, have generally been removed. Implementation of the proposed amendments to Regulation 8-3 would further reduce the VOC content of architectural coatings through reformulation. The amendments to Regulation 8-3 would not require development outside of existing areas and would not impact any native biological resoures.

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 architectural coating categories and operations affected by the proposed rule amendments to Regulation 8-3 are located throughout the area within the jurisdiction of the BAAQMD.

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 architectural coatings. There are existing laws designed to protect and mitigate potential impacts to cultural resources. Amendments to Regulation 8-3 are not expected to affect archeological or cultural sites because reformulation of architectural coatings would not require any construction activities. Existing facilities have been graded and developed, and architectural coatings are applied after construction activities are complete. No new construction would be required outside of the existing facility boundaries due to the adoption of the proposed amendments to Regulation 8-3. As a result, no significant adverse impacts to cultural resources are expected due to the proposed amendments to Regulation 8-3.

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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

The Bay Area is 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. Architectural coatings are applied to new and existing architectural structures, roads, roofs, swimming pools, etc. No major construction activities would be required as a result of adopting the proposed amendments to Regulation 8-3, as the proposed amendments affect coating formulators, sellers, and users and have no effects on geophysical formations in the District as no new structures would need to be constructed. Coating activities and operations would not change from current practices, i.e., people will not be exposed to adverse geological effects greater than what currently exists.

No new construction activities would be required due to the proposed amendments to Regulation 8-3 so no additional geologic hazards would be created. No significant impacts from seismic hazards are expected since no new development is required due to implementation of the proposed amendments to Regulation 8-3.

VII b. The proposed amendments to Regulation 8-3 do not require major construction activities such as grading or trenching, so existing geophysical conditions will be unaffected. Since no development will be required as a result of the proposed amendments, no soil is expected to be disturbed. Therefore, the lowering of VOC content limits of affected coating categories would not result in substantial soil erosion or the loss of topsoil as no major construction activities would be required.

VII c – e. The proposed amendments to Regulation 8-3 do not require construction of new structures. Since affected 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 8-3.

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 architectural coating manufacturing facilities handle and process measurable 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.

Hazards are related to the risks of fire, explosions, or releases of hazardous substances in the event of accident or upset conditions. Hazards are thus related to the production, use, storage, and transport of hazardous materials. Industrial production and processing facilities are potential sites for hazardous materials. Some facilities produce hazardous materials as their end product, while others use such materials as an input to their production processes. Examples of hazardous materials used by consumers include fuels, paints, paint thinner, nail polish, and solvents. Hazardous materials may be stored at facilities producing such materials and at facilities where hazardous materials are part of the production processes. Storage refers to the bulk handling of hazardous materials before and after they are transported to the general geographical area of use. Currently, hazardous materials are transported throughout District in great quantities via all modes of transportation including rail, highway, water, air, and pipeline.

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 types of 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.

Regulatory Background

The use, storage and transport of hazardous materials are subject to numerous laws and regulations at all levels of government. The most relevant existing hazardous materials laws and regulations include hazardous materials management planning, hazardous materials transportation, hazardous materials worker safety requirements, hazardous waste handling requirements and emergency response to hazardous materials and waste incidents.

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 8-3 will lead to a reduction in VOC emissions from architectural coatings. Most affected facilities are expected to comply with the proposed amendments to Regulation 8-3 by reducing the VOC content limit of certain coating categories. There are no provisions in the proposed amendments that would increase the total amount of coatings currently used by affected facilities. The use of new formulations of architectural coatings may alter chemical constituents of the solvents used in these operations. CARB concluded in the SCM for architectural coatings that resin manufacturers and coatings formulators will continue the trend of using less hazardous solvents such as propylene glycol in compliant coatings. It is expected that future compliant coatings will contain less hazardous materials, or non-hazardous materials, compared to conventional coatings, resulting in a net benefit regarding hazards (CARB, 2006).

Architectural coating operations are not expected to change from current practice and, thus, the amount of solvents used or transported is not expected to change. As the production and use of architectural coatings is not expected to change as a result of implementing Regulation 8-3, no additional transport of the solvents is expected and, thus, no new hazards to the public will be created through transport, use or disposal of hazardous materials. As a result, the proposed amendments are not expected to increase the probability of a hazardous material release.

It is assumed that coatings would be reformulated as water based or with solvents such as parachlorobenzotrifluoride (PCBTF) or acetone. There are two hazards to be considered when evaluating hazard impacts from reformulating coatings and solvents; flammability and ignitions/explosions. Reformulation with water-based coatings would reduce the risk of flammability, since solvents are not typically included as part of the formulation of these coatings. Acetone has the same flammability rating as the conventional solvents that would be replaced (toluene, xylene, MEK) (see Table 3-8). The National Fire Protection Association (NFPA) Flammability Classification for PCBTF is the lowest of the solvents evaluated (1 = combustible if heated versus 3 = warning: flammable liquid flash point below 100 degrees Fahrenheit (F)). Consequently, no increase in flammability due to reformulation is expected.

The auto-ignition temperature of a substance is the temperature at or above which a material will spontaneously ignite (catch fire) without an external source of ignition, such as a spark or flame. Flash point is the lowest temperature at which a liquid would have a concentration in the air near the liquid surface which could be ignitable by an external source of ignition (spark or flame). The lower the flash point, the easier it is to ignite the material. PCBTF also has characteristics that are similar to the solvents likely to be replaced; however, PCBTF's auto-ignition temperature is lower. While the auto-ignition temperature for PCBTF is the lowest of the solvents presented it is still 194 degrees F and the flashpoint temperature of 109 degrees F is higher than both the replacement solvents evaluated (CARB, 2006).

TABLE 3-8
Chemical Characteristics for Common Solvents

Chemical Compounds	M.W.	Boiling Point (F)	Flashpoint (F)	Vapor Pressure (mmHg @ 68 F)	Lower Explosive Limit (% by Vol.)	Flammability Classification (NFPA)*
Traditional/Conventional Solvents						
Toluene	92	231	40	22	1.3	3
Xylene	106	292	90	7	1.1	3
MEK	72	175	21	70	2.0	3
Isopropanol	60	180	53	33	2.0	3
Butyl Acetate	116	260	72	10	1.7	3
Isobutyl Alcohol	74	226	82	9	1.2	3
Stoddard Solvent	144	302-324	140	2	0.8	2
Petroleum Distillates (Naptha)	100	314-387	105	40	1.0	4
EGBE	118	340	141	0.6	1.1	2
EGME	76	256	107	6	2.5	2
EGEE	90	275	120	4	1.8	2
Replacement Solvents						
Acetone	58	133	1.4	180	2.6	3
Di-Propyl Glycol	134	451	279	30	1	1
Propylene Glycol	76	370	210	0.1	2.6	1
Ethylene Glycol	227	388	232	0.06	3.2	1
Texanol	216	471	248	0.1	0.62	1
Oxsol 100	181	282	109	5	0.90	1

Source: SCAQMD, 2005
*National Fire Protection Association. 0 = minimal; 1 = slight; 2 = moderate; 3 = serious; 4 = severe

Acetone has characteristics that are similar to the conventional solvents it would likely replace; however, the flash point temperature is the lowest compared to all solvents evaluated. Acetone vapors will not cause an explosion unless the vapor concentration exceeds 26,000 ppm. In contrast, toluene vapors can cause an explosion at 12,000 ppm; the concentration of MEK that could cause an explosion is 14,000 ppm; and the concentration of xylene vapors that could cause an explosion is even lower at 10,000 ppm. Under operating guidelines of working with flammable materials under well-ventilated areas, as prescribed by the fire department codes, it would be difficult to achieve concentrated streams of such vapors. Therefore, reformulation is not expected to increase, and may actually reduce ignition or explosion hazards.

The following safety practices and application techniques are recommended by the National Association of Corrosion Engineers (NACE) and the Society for Protective Coatings during the application of coatings and solvents including future compliant coatings and surface preparation and cleaning solvents.

- **Worker Isolation –** Areas where coatings with hazardous materials are applied should be restricted to essential workers. If feasible, these workers should avoid direct contact with hazardous materials by using automated equipment or an area with plenty of ventilation.

- **Protective Clothing and Equipment** – When there is the potential for hazardous material exposure, workers should be provided with and required to use appropriate personal protective clothing and equipment such as coveralls, footwear, chemical-resistant gloves and goggles, full faceshields, and suitable respiratory equipment.

- **Respiratory Protection –** Only the most protective respirators should be used for situations involving exposures to hazardous materials because they have poor warning properties, are potent sensitizers, or may be carcinogenic. Any respiratory protection program must, at a minimum, meet the requirements of the OSHA respiratory protection standard [29 CFR 1910.134]. Respirators must be certified by NIOSH and MSHA according to 30 CFR or by NIOSH (effective July 19, 1995) according to 42 CFR 84.

- **Worker and Employer Education –** Worker education is vital to a good occupational safety and health program. OSHA requires that workers be informed about hazardous materials they work with, potential hazards of those materials, training to minimize hazards, potential health effects of exposure, and methods to prevent exposure.

The fire departments regulate spray application of flammable or combustible liquids. They require no open flame, spark-producing equipment or exposed surfaces exceeding the ignition temperature of the material being sprayed within the area. For open spraying, as would be the case for the field application of the acetone-based coatings, no spark-producing equipment or open flame shall be within 20 feet horizontally and 10 feet vertically of the spray area. Anyone not complying with the guidelines would be in violation of the current fire codes. The fire departments limit residential storage of flammable liquids to five gallons and recommends storage in a cool place. If the flammable coating container will be exposed to direct sunlight or heat, storage in cool water is recommended. Finally, all metal containers involving the transfer of five gallons or more should be grounded and bonded.

Thus, applicators are not expected to require additional training regarding the proper handling or application of compliant coatings containing hazardous materials which will further reduce the applicator's exposure because these safety measures tend to be established in existing affected facilities (SCAQMD 2005).

Based upon all of the above considerations, hazard impacts are expected to be less than significant. It is expected that the lower VOC content limit coatings will contain less hazardous materials, or non-hazardous materials, as compared to conventional coatings, resulting in a net benefit regarding hazards. Reformulation with water-based coatings would reduce the risk of flammability, since solvents are not typically included as part of the formulation of these coatings and replacement solvents, such as acetone, have the same flammability rating as the conventional solvents that would be replaced (toluene, xylene, MEK). Replacement solvents generally have auto-ignition temperature and flash point temperature characteristics that are similar or better than conventional solvents. Reformulation is not expected to increase, and may actually reduce, flammability, ignition and explosion hazards. Local fire department and OSHA regulations coupled with standard operating practices ensure that conditions are in place to protect against hazard impacts. Therefore, no significant impacts on hazardous waste is expected.

VII d. No impacts on hazardous material sites are anticipated from the proposed rule amendments that would apply to architectural coatings manufacturers and applicators. 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. Architectural coating manufacturing facilites already exist, and are primarily located and operated within the confines of industrial and commercial facilities. The proposed rule amendments neither require, nor are likely to result in, activities that would affect 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 architectural coating manufacturers and applicators. The existing equipment and operations are primarily located within the confines of existing industrial and commercial facilities. Once the proposed amendments are implemented, facilities would be expected to comply by lowering the VOC content limit in certain coating categories. These changes are expected to be made within the confines of the existing facilities. No development outside of existing facilities is expected to be required by the proposed amendments to Regulation 8-3. Therefore, no significant adverse impacts on an airport land use plan or on a private air strip are expected.

VII g. No significant impacts on emergency response plans are anticipated from the proposed rule amendments. Reducing the VOC content of affected coatings is not expected to affect or interfere with a user's ability to comply with all adopted emergency response plans and emergency evacuation plans because the proposed amendments do not involve construction of any structures or features that could impede the execution of emergency response or emergency evacuation plans. Additionally, Health and Safety Code 25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In cooperation with California Office of Emergency Services, local jurisdiction have enacted ordinances that set standards for area and business mergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. 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 architectural coating manufacturers affected by the proposed amendments already exist and are primarily located and operate within the confines of existing industrial and commercial. The proposed amendments would not result in construction activities outside the boundaries of the existing facilities. No increase in exposure to wildfires will occur due to the proposed amendments to Regulation 8-3.

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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the Bay Area. 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 Bay Area is 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 constituent 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 amendments to Regulation 8-3, which would apply to architectural coating manufacturing facilities and coating applicators throughout the Bay Area. Lowering the VOC content limit of certain architectural coating categories at affected facilities will have no direct or indirect impact on hydrology and water quality because the reformulation of the coatings is not expected to change the current architectural coating operation practices or alter the coating formulations to be more detrimental to water quality.

CARB estimated the amount of water use associated with its proposed architectural coatings suggested control measure (CARB, 2000). The primary objective of CARB's control measure was to set VOC limits and other requirements that are feasible (based on current technology) and that will achieve significant emission reductions in VOC emissions from architectural coatings. CARB estimated that the projected water demand in the Bay Area would be about 6.28 million gallons per year by 2010 or about 17,206 gallons per day (CARB, 2000). Using CARB's estimate for water demand is expected to be conservative because many of the sources that would use reformulated coatings/solvents have already reformulated some of the coatings/solvents, and the estimate assumes that the only method for compliance would be reformulation. This potential water demand is within the capacity of water supplied from various sources in the Bay Area (estimated water demand of about 1,880 billion gallons per year in 2010) (CARB, 2000) and is not considered significant compared with current and projected future demand and supply. While there are projected drought-year shortages in some regions of California, these shortages would occur regardless of the proposed rule amendments.

The State Water Resources Control Board (SWRCB) and nine regional water quality control boards (RWQCB) are responsible for protecting surface and groundwater supplies in California, regulating waste disposal, and requiring cleanup of hazardous conditions (California Water §§13000 - 13999.16). In particular, the SWRCB establishes water-related policies and approves water quality control plans, which are implemented and enforced by the RWQCBs. These agencies also regulate discharges to State waters through federal National Pollution Discharge Elimination System (NPDES) permits. Discharges to publicly owned treatment works (POTW) are regulated through federal pretreatment requirements enforced by the POTWs.

The proposed amendments to Regulation 8-3 are not expected to adversely impact water quality since the use of less toxic exempt solvents is expected to result in equivalent or lesser water quality impacts than currently used solvents. Water resources impacts are considered significant if they cause changes in the course of water movements or of drainage or surface runoff patterns; substantially degrade water quality; deplete water

resources; significantly increase toxic inflow to public waste water treatment facilities; or interfere with groundwater recharge efforts. No significant adverse impacts are anticipated from implementation of the proposed amendments.

CARB's assessment for the 2008 SCM is based upon the analyses performed in the EIR for the 2000 SCM (CARB, 2007). The EIR performed in 2000 indicated that the increased water demand associated with implementation of the SCM is *de minimis*. The amendments to Regulation 8-3 are also not expected to adversely impact water quality because the use of exempt solvents is expected to result in equivalent or lesser water quality impacts than currently used solvents due to the compliant solvents being less toxic. Further, because currently available compliant coatings are already based on waterborne technology, no additional water quality impacts from future compliant waterborne coatings are expected because these coatings are also expected to be waterborne. Finally, the amendments to Regulation 8-3 are not expected to promote the use of compliant coatings formulated with hazardous solvents that could create water quality impacts.

VIII g – i. The architectural coating manufacturing operations and applicators affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD. No major construction activities are expected due to the adoption of the proposed amendments to Regulation 8-3. Coating manufacturers, and architectural structures, 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 architectural coating manufacturing operations and applicators affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD. No major construction activities are expected due to the adoption of the proposed amendments to Regulation 8-3. 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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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. No provisions of the proposed amendments to Regulation 8-3 would directly affect applicable land use plans, zoning ordinances, habitat conservation or natural community conservation plans. Architectural coating operations are expected to comply with Regulation 8-3 by reducing VOC content in numerous coating categories. These changes are expected to occur within the confines of existing facilities. No construction activities outside of the confines of existing facilities are expected to be required due to the adoption of the proposed amendments to Regulation 8-3, so no impacts on land use are expected. Architectural coating operations located in the District are not expected to need additional land to continue current operations or require rezoning to comply the proposed changes.

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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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 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. The proposed amendments are designed to lower VOC content in certain coating categories, and would not typically require mineral resources to reformulate compliant products. Therefore, no impacts on mineral resources are expected.

Based upon these considerations, significantly adverse impacts to mineral resources not expected from the implementation of the proposed amendments to Regulation 8-3.

		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

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Regulatory Background

Noise issues related to construction and operation activities are addressed in local General Plan policies and local noise ordinance standards. The General Plan and noise ordinances generally establish allowable noise limits within different land uses including residential areas, other sensitive use areas (e.g., schools, churches, hospitals, and libraries), commercial areas, and industrial areas.

Discussion of Impacts

XI a-d. The architectural coating categories and operations affected by the proposed rule amendments already exist and it is expected that while architectural coating operations are not noise intensive, painting contractors would comply with existing relevant local community noise standards and ordinances. Architectural coating formulators and painting contractors affected by the proposed rule amendments would be required to use coatings reformulated with lower VOC content.

No major construction activities would be required due to the adoption of the proposed amendments to Regulation 8-3 so that no noise impacts associated with the use of construction equipment and construction-related traffic is expected.

Noise from the proposed amendments is not expected to produce noise in excess of current operations at facilities that manufacture architectural coatings, or that produced by coating applications. In general, the primary noise source at existing facilities that manufacture architectural coatings is generated by vehicular traffic, spray equipment, and heavy equipment such as fork lifts and trucks. It is expected that each facility affected will comply with all existing noise control laws or ordinances. Further, the Occupational Safety and Health Administration (OSHA) and Cal/OSHA have established noise standards to protect worker health. Additionally, compliance with amendments to Regulation 8-3 is not expected to create significant noise impacts in residential areas as lowering VOC content in architectural coatings will not affect noise levels from coating applications as contractors would continue to use the same or similar equipment. Therefore, no adverse significant impacts to noise are expected due to the proposed project.

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 lowering of VOC content in certain architectural coating categories would not expose people residing or working in the project area to the same degree of excessive noise levels associated with airplanes. Compliance with amendments to Regulation 8-3 will not affect noise levels from coating applications as contractors would continue to use the same or similar equipment. 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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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 coating manufacturing facilities and coating contractors 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 amendments to Regulation 8-3. 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 would include minor modifications and/or changes at existing facilities located in the Bay Area, 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 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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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. The proposed amendments will require the lowering of VOC content in certain architectural coating categories, but all modifications would occur within the confines of the existing architectural coating manufacturers and with existing coating contrctors. The proposed amendments would not impact the

existing security and, therefore, are not expected to impact police services or require additional police protection.

Reformulation of coatings is not expected to require new or additional fire fighting resources. It is more likely that compliant reformulated coatings with less hazardous materials compared to current coatings will result in a reduction in the need for fire fighting services. Fire protection services are generally provided by city and county fire departments with some cities contracting with the county for services. Local fire departments function as the first responding emergency team in the event of a fire or release of hazardous materials. Additionally, coating materials compliant with the proposed amendments to Regulation 8-3 are not expected to cause significant adverse human health impacts, so accidental release scenarios would be expected to pose a lower risk to the public and less need for emergency responders. Also, if manufacturers continue to use solvents such as texanol, propylene glycol, ethylene glycol, etc., in water-borne coatings, fire departments would not be expected to experience adverse impacts as these solvents are generally equal to or less flammable than currently used solvents creating fewer emergency incidents. Therefore, the proposed amendments are not expected to significantly 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 existing coating manufacturers and contractors (e.g., workforce) are expected to be sufficient to accommodate any modifications or conversions that may be necessary at affected facilities and the reformulation of coatings 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 architectural coating categories and operations affected by the proposed rule amendments are located throughout the area within the jurisdiction of the BAAQMD.

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. The Metropolitan Transportation Commission is the main transportation planning agency in the Bay Area.

Discussion of Impacts

XV a-b. Since no major construction activities are expected as a result of implementing the proposed amendments to Regulation 8-3, no increase in construction-related traffic is expected.

Architectural coating manufacturers are not expected to increase or decrease the amount of coatings they produce, and coating contractors are not expected to change the amount of coatings they apply, as a result of the proposed rule amendments. Therefore, the number of trucks needed to deliver the materials to produce lower VOC content coatings should not significantly change from the current number of delivery trucks, and the number of trucks required to distribute reformulated coating products should not change. No additional delivery or disposal trucks are expected to be required due to the proposed rule amendments. The work force at each affected facility is not expected to increase as a result of the proposed amendments. Finally, coating contractors are not expected to travel any additional distance to apply coatings as a result of the proposed amendments. Thus, the traffic impacts associated with the proposed rule amendments are expected to be less than significant.

XV c. Though some of the coating manufacturers and contractors 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 influence or affect air traffic patterns. Further, the reformulation to lower VOC content coatings would not be expected to involve air traffic or affect navigable air space in any way. 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 coating manufacturing facilities. Thus, the proposed amendments are not expected to increase traffic hazards or create incompatible uses at or adjacent to the affected coating manufacturing 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 architectural coating manufacturing 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 and procedures and 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 significant impact on parking for construction workers is expected. Further, no additional parking is expected to be needed after adoption of the proposed rule amendments because no increase in employees at architectural coating manufacturing facilities are expected and no increase in painting contractors is expected to be required. 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).

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 architectural coating manufacturers, which is not 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 operations affected by the proposed rule amendments already exist and are primarily located within the confines of existing architectural coating manufacturing facilities. The proposed rule amendments are not expected to generate additional wastewater at the affected facilities. See Section VIIIa for further discussion on wastewater impacts.

XVI c. The affected facilities are expected to comply with the proposed amendments by lowering the VOC content in certain architectural coating categories. No major construction activities would be required as a result of adopting the proposed amendments at the existing facilities. Any facility modifications would be expected to occur within the confines of 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. Coating operations are not expected to change as a result of the proposed amendments to Regulation 8-3. The volume of coatings and coating wastes are also not expected to increase or decrease as a result of the proposed amendments. As a result, no new solid or hazardous waste will be generated due to the lowering of the VOC content limit in certain coating categories. Therefore, potential adverse solid waste impacts are considered to be less than significant.

		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 VOC emission reductions from architectural coatings, thus providing a beneficial air quality impact and related health effects. 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 VOCs from affected facilities and applications, thus providing a beneficial air quality impact, improvement in air quality, and reduced health impacts due to reduce exposure to VOC emissions. The proposed rule amendments are part of a long-term plan to reduce the potential health impacts due to exposure VOC emissions. 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. In fact, the proposed rule amendments are expected to provide beneficial health impacts by reducing exposure to VOCs in the Bay Area No significant adverse environmental impacts are expected due to implementation of the proposed rule amendments.

CHAPTER 4

REFERENCES

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